Vol. XXIII, 2 Whole No. 2

# THE PHILOSOPHICAL REVIEW

EDITED BY

J. E. CRREIGHTON

OF THE SAGE SCHOOL OF PHILOSOPHY, CORNELL UNIVERSITY

WITH THE COÖPERATION OF

JAMES SETH

OF THE UNIVERSITY OF EDINBURGH

MARCH, 1914

I. Time and the Experience of Time . . . EVANDER BRADLEY McGILVARY

II. The Problem of Knowledge from the Standpoint of Validity (II). ARCHIBALD A. BOWMAN

III. The Standpoint of Psychology . . . . . J. B. CREIGHTON

IV. Proceedings of the Thirteenth Annual Meeting of the American Philosophical Association

V. Reviews of Books: *Maurice Parmelee*, The Science of Human Behavior: by W. B. Pillsbury—*E. v. Aster*, Prinzipien der Erkenntnislehre: by Edward M. Weyer—*G. F. Arnold*, Psychology Applied to Legal Evidence and other Constructions of the Law: by John H. Wigmore—*Henry W. Wright*, Self-Realization. An Outline of Ethics: by George A. Wilson—*O. O. Fletcher*, Introduction to Philosophy: by G. Watts Cunningham.

VI. Notices of New Books

VII. Summaries of Articles

VIII. Notes

PUBLISHED BI-MONTHLY

LONGMANS, GREEN, AND CO.

LANCASTER, PA.

FOURTH AVENUE AND 30th STREET, NEW YORK

LONDON AGENCY, 39 PATERNOSTER ROW, E. C.

SINGLE NUMBERS 60c. (3s. net.) PER ANNUM, $3.00 (14s.)

# The Philosophical Review

## Contents for March, 1914


PAGE

Time and the Experience of Time . . . . . Evander Bradley McGilvary 121

The Problem of Knowledge from the Standpoint of Validity. II. Archibald A. Bowman 146

The Standpoint of Psychology . . . . . J. E. Creighton 159

Proceedings of the Thirteenth Annual Meeting of the American Philosophical Association . . . . . 176

Reviews of Books: . . . . . 203

*Maurice Parmelee*, The Science of Human Behavior: by W. B. Pillsbury—*E. V. Aster*, Prinzipien der Erkenntnislehre: by Edward M. Weyer—*G. F. Arnold*, Psychology Applied to Legal Evidence and Other Constructions of the Law: by John H. Wigmore—*Henry W. Wright*, Self-Realization. An Outline of Ethics: by George A. Wilson—*O. O. Fletcher*, Introduction to Philosophy: by G. Watts Cunningham.

Notices of New Books: . . . . . 221

*E. Dupreel*, Le Rapport Social, Essai sur l'objet et la méthode de la sociologie—*Ernst Cassirer*, Immanuel Kants Werke, Band III und IV—*Gustav Theodor Richter*, Spinozas Philosophische Terminologie—L'Année philosophique, 1911. Publiée sous la direction de F. Pillon—*Helmuth Plessner*, Die Wissenschaftliche Idee—*Salomon Maimon*, Versuch einer neuen Logik oder Theorie des Denkens—*Émile Bréhier*, Schelling—*T. Duine*, La Mennais, L'homme et l'écrivain—*M. Krewer*, Grundlagen einer organischen Weltanschauung—*Fritz Heinemann*, Der Aufbau von Kants Kritik der reinen Vernuft und das Problem der Zeit—*Aloys Müller*, Wahrheit und Wirklichkeit: Untersuchungen zum realistischen Wahrheitsproblem.

Summaries of Articles: . . . . . 236

*James Y. Simpson*, The Fitness of the Environment—*G. Heymans*, Im Sachen des psychischen Monismus, I and II—*Sir Frederick Pollock*, The Relation of Mystic Experience to Philosophy—*G. F. Barbour*, Christian Ethics and the Ideal of Nationality—*Henry J. Watts*, The Main Principles of Sensory Integration—*L. F. Bosc*, L'Inutlité du Vitalisme—*Jules de Gaultier*, Le monde comme volonté de représentation—*Douglas C. Macintosh*, Is Realistic Epistemological Monism Inadmissible?—*H. Höffding*, Sören Kierkegaard—*Felix Goldstr*, Logisch-metaphysische Gedanken über Freiheit und Notwendigkeit—*C. Radulescu-Motru*, La conscience transcendentale—*Karl Skopek*, Die Begründung einer idealen Weltanschauung—*Ernst Barthel*, Ein Beweis für die Unrichtigkeit der Kausalhypothese—*H. D. Noble*, La connaissance affective—*Edmond Goblot*, Remarques sur la théorie logique du jugement—*F. Blanche*, L'ambiguité de la notion d'idée chez Spinoza—*H. S. Shelton*, The Hegelian Concept of the State and Modern Individualism—*Olivér v. Hazay*, Gegenstandstheoretische Betrachtungen über Wahrnehmung und ihr Verhältnis zu anderen Gegenständen der Psychologie.

Notes . . . . . 253



Articles intended for publication, books for review, exchanges, and all correspondence in reference thereto, should be addressed to **Professor J. E. Creighton, The Philosophical Review, Cornell University, Ithaca, N. Y.**


---


LONGMANS, GREEN, AND CO.

41 N. Queen St., Lancaster, Pa., 443 Fourth Ave., New York City.



Copyrighted in the name of the Treasurer of Cornell University.



Entered in the post-office at Lancaster, Pa., as second-class matter.

*Volume XXIII.* *March, 1914.* *Whole*
*Number 2.* *Number 134.*

# THE PHILOSOPHICAL REVIEW.

## TIME AND THE EXPERIENCE OF TIME.[1]

TIME is a promise and a threat: the stream we breast holds in solution our hopes and our fears. Time is regret and relief: the solution precipitates some beautiful crystal, but alas! we are swept onward and to our sorrow must leave the treasure behind. Or the solution deposits some noisome ooze which clears the flood and we move forward rejoicing in the purified and sweetened bath. Such is time for the man who does not reflect on the nature of time. It is literally a matter of course. *Die Zeit versteht sich von selbst; der Mensch versteht die Zeit nicht.* Such would seem to be the conclusion to be drawn from the various conclusions man's intellect has arrived at in seeking to understand time. To the man who reflects time has always been a problem, a challenge which the deepest thinkers have had constantly thrown in their face. Some like Parmenides meet the challenge with supercilious disdain. Some like Heraclitus accept service under the inscrutable challenger and fight by his side. Almost every philosopher worthy of his spurs has entered the list in support or in defiance of the cause which to the man of action seems to be so obviously just that it is not worth fighting about. Plato, Aristotle, Plotinus, St. Augustine, Spinoza, Leibniz, Kant, Hegel—this is only a selection from the roster of heroes in this war of the ages.

The problem of time is especially acute for the philosophers of to-day, and the thinkers to whom this urgency is most due, at least for us in this Association, are William James, Josiah

[1] Delivered—with a few omissions—as the presidential address before the Thirteenth Annual Meeting of the American Philosophical Association at Yale University, December 29, 1913.

Royce, and Henri Bergson. They were of course not the first of their generation to feel the pressure of the difficulties which time presents; but perhaps more than any other recent thinkers they have made the nature of time the basis of their philosophies, however different be the time which each discovers and defends. Others of our membership beside the two Americans just named have added their contribution toward making the time-problem a vital issue for us. I think therefore that you will agree with me that for this occasion no subject is more deserving of treatment than "Time and the Experience of Time."

The only considerations that have made me hesitate in my choice of this topic are its intricacy, which makes it little fit for a popular address, and the magnitude of it, which makes it impossible for me to do more than traverse a very small stretch of a vast continent in the minutes at my disposal. But the character of your former presidential addresses has led me to assume that you would prefer from your speaker of this evening an attempt at a serious discussion of a weighty matter, rather than a lighter treatment of some easier subject which would not require much exertion either from you or from me. I shall, therefore, not apologize for inviting you to follow me through a discussion which will be full of technicalities more seemly in a paper one may read or not as the humor takes him, than in an address in which the courtesies of this hour put the hearers at the speaker's mercy.

That in some sense we all have an experience of time every one admits. The real problem comes when we attempt to state what it is that we experience when we experience time, and to set forth what the critical intellect has to say about what is thus described. Any one who seeks to justify the ways of time to logic must first make clear what it is that he undertakes to justify. Time described one way may be logically indefensible, and the man who thinks he experiences it that way must reject time as being unreal or he must abjure logic as an arbiter of reality. Now when different persons come to describe what time presents to their experience, the result is a surprising medley of variances. It is easy thus to see why time should be

a great divide in philosophical topography. Whether it be a principle of externality or not, it is the source of a vast amount of mutual externality on the part of philosophical systems.

Were it not for the hopelessly incurable optimism of philosophers, were it not for their ineradicable faith that everybody's experience of time is at bottom of the same type and that an accurate description of this common experience by any one will ultimately meet with the acceptance of all, the easier conclusion would long ago have been drawn that man is the measure of his own time—of the time that is, that it is; of the time that is not, that it is not. A common time experienced by all, or different times severally experienced and yet fundamentally similar to each other even though the different descriptions thereof disagree, this has been the common postulate of all previous discussions of time. When a philosopher has given what he believes to be a true account of time as he experiences it, he assumes forthwith that any divergent account given by some one else is incorrect. It might be worth while to ascertain by experiment whether such personal idiosyncrasies as manifest themselves in color-experiences do not also occur in the experience of time. But this would be a task for the psychologist. This evening I shall in the empirical part of my paper deal with my own experience alone, telling you how I think time appears there. You as philosophers will of course exercise your prerogative in agreeing with me, or in thinking me in error.

I cannot do better than begin with a familiar quotation from William James's famous chapter on "The Perception of Time." The "practically cognized present is no knife-edge, but a saddleback, with a certain breadth of its own on which we sit perched, and from which we look in two directions into time. The unit of composition of our perception of time is a *duration*, with a bow and a stern, as it were—a rearward- and a forward-looking end. It is only as parts of this *duration-block* that the relation of *succession* of one end to the other is perceived. . . . The experience is from the outset a synthetic datum, not a simple one; and to sensible perception its elements are inseparable . . . ."[1] The experienced present is thus a series of events

[1] *Principles of Psychology*, I, pp. 609–610.

interrelated as some before and some after others. Some of these events are experienced as themselves having a duration; others, paradoxically, are not so experienced. In other words, there are experiences in which, within the present as thus described, events are experienced as some shorter and some longer than others, and there are other experiences in which the events have no experienced length at all.

In the former case the comparative length of the temporal events is a quantitative distinction. In saying this I do not mean that there is always a recognition of an analogy, of a similarity of ratios, obtaining between the comparative length of events and the comparative length of things in space. Of course the fact that temporal magnitude has similarity to spatial magnitude is something we could learn only by comparison of temporal duration with spatial length. But there *is* a distinction experienced between the different temporal events themselves which, when compared with the distinctions in space, is explicitly recognized as of a common type with the latter, and has as much right to be called a distinction of magnitude. Thus in a musical measure what we call the half-note, the quarter and the two eighths are experienced as having different characters, and when we come to name these characters in quantitative terms we are not importing into them a foreign element. Without recourse to spatial analogies we have in the very experience of a melody itself the materials sufficient to provoke comparison between one note and another and to force recognition of one note as longer than another. Magnitude is indeed a relative matter, but within the present moment there may be several temporal events to be compared solely with each other; and the result of such a comparison is the recognition of relations of magnitude among them.

But there are experienced durational wholes whose parts are not all experienced as themselves having duration. These parts come in succession but do not seem to last at all. Their sequence is experienced, but they do not have in the experience any of the spread or protension that the moment as a whole has. For instance very short taps, whose duration is capable of being

measured by instruments, may appear in experience as succeeding one another, but may not appear as having a temporal length. They come and go but do not make any stay. If later in our theory we attribute length to them we say that they were so short that their length was not capable of being perceived as such. If now these short taps are interspersed with longer beats the paradoxical character of the experience is intensified. The short ones are experienced as not so long as the long ones, and yet when we attend to any short tap by itself we cannot discover any duration in it. It has enough magnitude to admit of comparison with another magnitude, but not enough magnitude to be detected alone. Such events are experienced, and are not experienced, as having magnitude. All such temporal events as seem to take no time for their occurrence are the *minima sensibilia* of duration, sharing with the *minima sensibilia* of spatial extension the perplexing character of being perceived as parts of a continuum without being perceived as having the quality which for reflection ought to belong to them as parts. In these *minima* we find perhaps the basis of empirical fact which Hume used for his theory of space and time. He was unfortunate in building his theory on just such facts alone, without taking into account other facts equally important.

Not only has my experience a durational span within which certain events are before others, but this span is a moving span. The earlier contents drop out of experience and what was previously the latest element has its privilege of novelty taken from it by the appearance of still newer events. To use a common metaphor, there is a ripening and dropping of the fruit of time, and new burgeonings appear at the growing point. With such change we say that a new moment has arisen, in that the later moment appreciably differs from the former. It is less than the former moment by what has disappeared; it is more by what has appeared. And yet it is not altogether a new moment; for it shares with its predecessor the latter's last term and whatever lay between that last term and the vanished term. It is part of its predecessor with more added. There is no gap between the two moments, any more than there is a gap between

the two lines *ac* and *bd* when the points *a*, *b*, *c*, and *d* lie on a longer line in the order named. In the continuum of duration traversed by our waking life the successive moments thus overlap. From one moment we get to another that does not overlap it only by going through intervening moments which do overlap one another.

But this is not all that the continuity of time is experienced as being. What we have spoken of as successive overlapping moments do not differentiate themselves from each other in such fashion that the moments always come by jerks, one moment lasting unchanged and then being suddenly followed by another, with static demarcations. When for instance we look out of the window of a moving train, our field of experience changes, and yet the moments which succeed each other do not follow by instantaneously instated seconds or fractions of seconds. In this sense there is no moment which can be said to be just the next moment. Referring again to the spatial analogy used above, let one moment be represented by the line *ac* and a succeeding moment by the line *bd*, the points *a*, *b*, *c*, and *d* being disposed as before. As *ac* moves forward it is not suddenly replaced by *bd*; it glides into *bd*. There is of course such a thing as the experience of the sudden emergence of a new moment, as when a thunder clap breaks in upon us unexpectedly or when things which have continued for a while in our experience incontinently disappear. With such experiences of jerkiness I cannot deal in this paper. What I wish to bring out here is that such experiences are by no means the only kind we have. We often experience a continuity of the type exemplified by the continuously shifting scene of the railway passenger. Here attention may divide the continuity into a definite number of succeeding moments, which may or may not overlap. But between the high tides in the successive pulses of attention there are the gradual ebbs and flows.[1] This gliding character which marks the transition from accentuated moment to accentuated moment cannot be analyzed into something else.

[1] Still another feature of the moving moment should be noticed in passing: its posterior terminus is not always clearly defined. The rear of the present may melt into the past instead of having an abrupt termination.

It is experienced as something *sui generis*. It is an irreducible feature of time's nature, or what James would have called an "empirical fundamentum of our knowledge" of time's continuity.

I should like to borrow another of James's picturesque phrases to indicate what I mean. Time indeed does "grow by finite buds or drops."[1] But it should be remembered that of at least some buds and drops it cannot be said that either nothing comes at all or certain units of amount burst into being at a stroke.[2] Whoever watches a slowly leaking faucet with the drops forming and breaking away gets a typical experience of the continuity of time. The new drops do not come into being all at once; they grow, swelling visibly and lengthening out, they gradually thin at the top, and they fall away, each leaving at the instant of its fall the beginning of a new drop above. The drops may come faster and faster, but never so fast as drops but that the same process is repeated in a different rhythm. If they come too fast for their turgescence to be experienced they cease to be experienced as drops; they are lost in a stream, which still more clearly embodies the continuity of time. The mistake of James, I cannot but think, was that in the employment of this figure he regarded the growth of time as represented by the filling of a cask which receives the full-grown drops or receives nothing at all.[3] Time is not the cask under the faucet; it is the process of drop-formation and drop-deposition at the faucet. The cask, if it is to have a place in the figure at all, is past time, not the present. But even for the past the cask is, as we shall see, an inadequate symbol.

There is still another feature of time which must be noted before our description can be offered as a sufficiently adequate description of time for our purpose. Time is not only experienced as a continuous succession of events; it is a succession of events not all of which are successive one to another, for some events are experienced as simultaneous with each other.[4] In

[1] *Some Problems of Philosophy*, p. 154.

[2] *Ibid.*

[3] *Ibid.*, p. 172.

[4] This is of course empirical simultaneity, and will be later distinguished from another kind of simultaneity.

other words the comparison of time with a line fails to do justice to what may metaphorically be called the solidity of time. Time is not a line; it is a stream in which events stand in transverse as well as in longitudinal direction *inter se*. Simultaneity like succession cannot be defined; it must be experienced to be known. But when experienced it can be contrasted with succession, as being a temporal relation which is non-successive. Its contrast with succession can be compared with the interrelation of the different dimensions of space. The different dimensions of space are all but qualitatively indifferent in our experience; *i. e.* they are interchangeable. While right feels different from left and front from back, a turn of the body can reverse these directions. But by no tergiversation can the experience of simultaneity be changed into that of succession or that of succession into that of simultaneity. The directions of time permit no change of front.[1] Neither does the direction of simultaneity have what the mathematicians call different senses. The simultaneity of $a$ with $b$ has the same sense as that of $b$ with $a$: the difference is merely verbal.[2] In calling simultaneity a direction we must be on our guard against supposing that it is on all fours with the two directions of succession or with spatial directions.

Now many events that occur at the same time occur at different places. For this reason it has been suggested that time and space are mutually complementary, in such wise that succession should be considered the fourth dimension of space, or the three dimensions of space specifications of temporal simultaneity. That time and space are intimately connected is indubitable; but there are two considerations that prevent a literal acceptance of this particular view of their interrelation. One is that there may be simultaneity of qualities without difference of spatial position, as when roughness and heat are experienced at the

[1] A motion of translation of the body, not one of rotation, will accomplish a change of empirical simultaneity into empirical succession or *vice versa*, as instanced in the lightning-flash and the thunder.

[2] The same statement holds for many other relations often treated as having different senses. Real difference of sense seems to belong only to asymmetrical relations.

same time in the same part of the same object, and the other is that there are differences in spatial position which cannot be stated in terms of simultaneity, as when the same body is in different places at *different* times. It will therefore better serve our purpose of empirical description if we distinguish quite sharply between simultaneity and spatial dimensions, while recognizing their mutual complications.

We are now in a position from which to advance to the question of the logical consistency of time as so far described, and to a view of time as transcendent of our experience while partly immanent in it. Time as I have set it forth will doubtless be assailed as involving contradictions. Such an assault will have various motives. Some persons may be inclined to accept the description as in the main accurate, and yet on account of alleged contradictions they may maintain that time is an illusion and not a reality. Some may on account of these alleged contradictions challenge the correctness of the description. In either case the likelihood is that logic will be considered as an unyielding uncompromising imperative. This view of the nature of logic would require much discussion to do it justice; and for the present I must content myself, even if I cannot content all my hearers, with indicating dogmatically my agreement with those who regard logic as a machinery which is not once for all perfect. Its limitations, therefore, do not permit it to put a bar to all further progress in the same direction when once something has been found contradictory. A new conception may render logically compatible what without that conception would be incompatible. Logical impossibility may be provisional as physical impossibility may be provisional. Just as only a few years ago it was physically impossible to send telegraphic messages except over connecting wires and yet to-day wireless telegraphy is an accomplished fact; just as what was impossible in mathematics before the invention of the calculus is now an easy feat; so in dealing with time what is logically impossible without some solving concepts may be thoroughly practicable for logic when these concepts have been put into service. The business of the logician is not to put a veto upon experienced

fact because of its self-contradictoriness, but to forge new concepts or apply old ones which shall remove the contradictions in our view of the facts. In our case I think it will be found that the desired concepts are not new; the trouble has been that their significance for the time-problem has not been generally recognized.

Experienced time I have already shown to be continuous in the sense indicated. This continuous time I believe to be a part of a real infinite continuum. And here we are face to face with what has been regarded by many as a hopeless contradiction, or rather a jumble of contradictions. You are all familiar with the dialectic in this matter, and I will not stop to rehearse the venerable arguments. I will merely attempt to state a view of the temporal continuum, a view which is based on the empirical description I have given, and which I venture to believe is not self-contradictory.

What is a continuum? It would be rash to attempt to define the indefinable, but at least we can describe some of its characters. In giving this description, I purposely leave out of account the number-continuum for reasons which I cannot here state. I shall have in mind only the continua of space and time. Both these continua are stretches or reaches, and the nature of a stretch or reach whether temporal or spatial is an ultimate fact incapable of analysis. It is something we experience. But in experience we get what we regard as only parts of stretches, there being more of either stretch beyond the limits of experience. The qualitative nature of either continuum is revealed in the portion which appears in experience; but what is revealed is only a portion. In short our view commits us to the position that a continuum is capable of partition in such a manner that the parts exist in the continuum without destroying its continuity. The partition of the continuum does not break it up into discrete fragments.

Before considering the temporal continuum let us take a brief glance at the continuum of space, for the nature of either is more clearly apprehended when it is compared with the other. The spatial continuum is not made up of parts; these arise by

its partition. The continuum is not a whole formed by the aggregation of parts; or, as Kant put it, these parts cannot be considered as antecedent to the one and all-embracing space, but can be thought of as existing only within it. The continuum is not a whole, for a whole in the strict sense of the term is something complete and rounded off. There is no reason to think that space is such; nor, so far as I can see, is there any contradiction in supposing that it is not such. A contradiction would arise only in case we asserted that a continuum is made up by an aggregation of its parts. In other words there would be contradiction only if 'part' were exclusively correlated with 'whole.' We must limber our conception of part and not allow it to remain in such rigid correlation with whole. Parts are sometimes parts of wholes, and sometimes they are parts of a non-total, unending continuum. The coming into being of parts of space by partition of the spatial continuum is not the coming into being of the spatial stretches found in the parts when the latter arise as parts; it is merely the demarcation of these stretches within the continuum. The stretches are already there as stretch before they are marked off.

What is said in the last two sentences does not hold good of the continuum of time; or in other words the temporal continuum cannot, like the spatial continuum, be expressed in terms of one tense. Of space we may say that it was a continuum, and we have uttered a truth that requires no qualification. We may further say that it *is* a continuum; this adds to what we have just said, but does not modify it. We may go on to say that it *shall be* a continuum; we then state an additional truth; but each of these three truths are truths without reserve and without mutual compromise. We cannot, however, make the three corresponding statements about time and have each statement true as it stands in its separateness from the rest. Perhaps the best we can do with the language at our disposal is to express the continuity of time by the use of the awkward hyphen. Time was-is-and-shall-be a continuum. The present moment parts this continuum, and only of this portion of the continuum can the present tense be used in its strictness. This part *was not* a

temporal stretch till the partition *takes* place. You will please pardon the unidiomatic sequence of tenses; it is not my fault; I am only trying to be true to time's nature. The past is not; it was. The future is not; it shall be. Only the present is; but it is *only as part of a continuum whose stretch included the past and shall include the future.* This temporal continuum—here I drop the past and future tenses for brevity—this continuum is eternity, of which only the present is extant.

This continuum is sometimes spoken of as a growing continuum. Such a mode of statement expresses a truth; but like all statements about time made in terms of one tense it is incomplete and therefore inaccurate. The *present* indeed advances at the expense of the future; it recedes to the gain of the past: the *past* has grown. Now as the only part of time's stretch to which we can strictly and empirically apply the present tense is the present moment, we must speak of time as moving forward, leaving more past behind: this is exactly what the present is always doing; and what the present is doing time is doing, the present being all there *is* of time. But time has been more than the present which loses; it shall be more than the present which gains. And of this time, infinitely vaster in either direction than the present, gain and loss cannot be predicated. Time has transcended the losing present; it shall transcend the gaining present.

With this insight we can do justice to both the eternalists and the temporalists. The eternalists have been right in insisting on time's transcendence of the present; but they have been—at best linguistically, at worst materially—in error in making this transcendence a *present* transcendence. The temporalists have been right in insisting on growth and novelty in time; but they have been in error in supposing that what shall accrue to the present shall be a merely adventitious, accidental accretion to time. The eternalists have apprehended the continuity of time; but, while discriminating past, present and future, they have yet regarded this continuity as a *totum simul.* In doing this the eternalists have been guilty of flagrant contradiction, or of an unresolved ambiguity in each of the terms used. The

temporalists have apprehended the tripartite nature of time; but they have been unable to see the parts as successively *together in the continuum.* To sum up by an historical allusion, the eternalists have reasoned or at least have expressed themselves like the Arians, the temporalists like the tritheists with regard to the really trinitarian character of time: Three tenses in one Time.

Once recognize that in dealing with time you are dealing with what was and shall be as well as with what is, and make the necessary distinction in thought even though you find it too cumbersome always to fit your language nicely to your thought, and you shall avoid many of the contradictions that have been charged to the conception of the time-continuum. Hereafter I shall not continue to defy usage by monstrously multiplying or cunningly selecting the tenses of the verbs I shall employ of the time-continuum or of its different divisions. I shall ask you to relieve me of the necessity of such pedantry by understanding my expression in the light of the preceding exposition. If what I have already said does not seem to you to solve the difficulties I have been dealing with, I can hardly hope to be better understood for constant reiteration. I may thus recaptitulate what I have been lately saying: Time differs from space in that what of the temporal continuum is not in one part of it, namely the present, *is not* at all: it either *was* or *shall be.* Of the spatial continuum what is not in one part *is* somewhere else.

We have seen that the present moment is a reach or a stretch; it is a duration. Now what is it that marks it off from the past and the future? Is the partition that demarks it something 'arbitrary' and 'factitious'? Such has been the charge that has been made. The reply requires that we should examine the concept of contemporaneity as distinguished from that of simultaneity. By contemporaneity I here mean togetherness within the same durational unit. For instance if the unit under consideration be a day, two events are contemporaneous when they occur within the same day. There may be an eleven-hours' interval between them, and hence they are not simultaneous; yet because they occur 'within the same time,' *i. e.* within the

same durational unit under consideration, I call them contemporaneous. This concept of contemporaneity is admitted by a critic of it to be no novelty. It should likewise be admitted that its age is no handicap. It should not be refused an opportunity to render service just because it appears at the employment bureau with hoary head and wrinkled face. In philosophy there should be no Oslerization.

Now time is divided into durational portions by the events which occur within it. Such division is neither factitious nor arbitrary. The fact for instance that time on our planet is divided into years, and years into seasons, and seasons into days, is a thoroughly natural fact. A natural cycle completes itself every three hundred and sixty five days or thereabouts. And within this cycle spring, summer, autumn and winter are not made by us to suit our purposes, neither is it by our arbitrium or our doing that the sun rises and sets. Our purposes may be connected with these divisions, but when they are they take into account natural divisions that we find taking place without our leave and without our fiat. There are of course arbitrary groupings of natural divisions of time, as in the calendar; what is more important is that there are natural divisions likewise. Any portion of temporal duration marked off by the beginning and the ending of any natural event is a natural durational unit of time, and there are any number of such units. Which units we shall use for any purpose is indeed a matter of our choice; but so long as the units are not constituted but are merely taken by our choice, being constituted by natural processes with natural terminations, the units are not arbitrary or factitious. We have here something similar to geographical units. The Mississippi flows between several pairs of states. The boundary it makes between Wisconsin and Minnesota, between Illinois and Iowa, is a natural boundary. The choice of the boundary for political purposes, indicated by the state-names, did not make it the natural boundary it is; it merely put into social use what had already existed. In like manner events that happen on the same day are not made contemporaneous by our choice of the day as a unit of reckoning; they are made so

by the fact that the events, independently of our choice, fall within the same natural time-divisions, marked off by successive sunrises and sunsets. They are diurnally contemporaneous, even if we do not choose to consider this contemporaneity but with equal truth speak of them as not contemporaneous because they do not fall on the same side of midday. It is the same old query as to whether a dog can be small relatively to an elephant when he is large as compared with a mouse.

Now among the natural events which have a time span, and are thus durational units,[1] the most important one for our purposes is the present moment. A certain extent of the temporal continuum is included in the organization which consciousness effects. This organization is as natural a thing as any other you can name. I do not will my present moment to be just so long as it is; I find it so. As far back as my present experience reaches, that stretch is my present,[2] as far forward as it reaches, that stretch is my present. Within this present, as we have seen, there is a prior and a posterior; but the prior is not past; the posterior is not future. The past is what is *prior to the present*, the future is what is *posterior to the present*, while the prior *within* the present is prior to what is therein posterior, and *vice versa*.

[1] There is one important difference between durational units, which I must emphasize here. One kind of unit is *as a whole* static and the other is as a whole a moving unit. A calendar year *e. g.*, has a stretch, which is partitioned off in the continuum; but this stretch has just one beginning and one end. It does not keep on beginning and keep on ending. Its termini are fixed. They are dates; when they are given, they are given *once for all*. Not so with the moving span or moving durational unit. The present, for instance, goes forward as a whole, with ever renewed termini. All durational units have movements *within* them; but the moving durational unit not only has movement within it; it itself moves onward in its totality. The present is not like a calendar year; it is more like an advancing sandstorm, which has a new beginning and a new ending for each place it reaches. But unlike the sandstorm it does not have to move *in space* in order to move: time is a sufficient medium for its motion. Losing and gaining, but perpetually reconstituting itself, its unity remains always intact as a unity totally and entirely present. Bergson has spoken of the continuous progress of the *past* which gnaws into the future and which swells as it advances. The view I am presenting would be expressed by speaking of the continuous progress of the *present* which gnaws into the future and leaves its cuttings behind. The past is left behind, or rather *was* left.

[2] Much of this paper consists in the statement of tautologies; I do not know what else to do than reiterate tautologies when others deny them.

Neither is the prior within the present prior to some *instant* which is *the* present *par excellence*. Of instants I shall have more to say presently. But now I shall anticipate somewhat and say that there never is *the* present instant: there are always at least two, the rearward and the forward termini of the present moment, the so-called specious present. The rearward terminus is as we have seen not always clearly set off on the continuum, and in this respect it is similar to the boundaries of experienced space. But there is no more reason to believe that the present does not terminate posteriorly, than that the rainbow does not terminate laterally, although we may not be able to fix by attention its precise outlines. Between the first and the last instants, terminating the present, there are likely to be others, equally *present*. Present instants there may be in abundance, but *the* present instant there is not. In practical life our interest is mainly fixed on the oncoming; there is thus a pragmatic reason for singling out the forward terminus, which is besides likely to be more distinct, as the present instant. No theoretical confusion arises from this provided it be recognized that all other boundaries between events lying within the present are likewise present instants. Perhaps I can illustrate what I mean by comparing the present with the water of a lake passing through a moving cylinder open at both ends. The water at any time in the rear end of the cylinder will represent what is prior within the present; the water in the forward end will represent what is posterior within the present. Both the posterior and the prior waters are in the cylinder, and all that is within the cylinder typifies the present. But there are many inadequacies in this illustration, some of which will be noticed in a few moments.

How far back the present can reach is not to be determined *a priori*. The present is elastic, contracting and expanding, and therein the rigid cylinder fails as an illustration. The backward reach of experience varies for instance with the spatial distance of the experienced object from the organism which is central to the experience. In these variations there are different constants, namely the different velocities of the eventual stimuli which give rise to the experience. The greater the velocity the

less is the temporal reach for any fixed distance at which the experienced object lies. This backward reach is backward not from the present but from the date of the organic disturbance the stimulus occasions. What we experience is therefore always present. But we usually speak of some experienced things as past, meaning thereby—we ought to mean if we do not mean—that they are prior to the organic disturbance involved in the experience or to something else which interests us in the present. For accuracy's sake it would be well, in speaking only of the things we actually experience or have experienced, to distinguish sharply between the past and the prior. The past, as I have before emphasized, is what is *prior to the present as a whole*, while the prior has as its correlative whatever event we may choose provided it lie in the forward direction from it in the temporal continuum.[1]

It is often said that the present moment has for us only a few seconds' duration. This is true only so far as events in our immediate neighborhood are concerned. When the events are remote in space, this duration is enlarged as we discover not by immediate experience but by secondary methods. The longitudinal cross-section of the present, so to speak, is not rectangular as that of a cylinder; it is a parallelogram, its rear angle obtuse to the line of forward direction; and it is not one parallelogram but many, with varying degrees of angular obtuseness, each parallelogram representing the objects present to one of the senses and all of them having a common base a few seconds long. The lag of perception can thus be pictured after the analogy of a many-tailed comet nearing its perihelion.

Our popular reckoning with regard to things we do *not* experience is secured by their ascertained relations of simultaneity to the objects we do experience. What is simultaneous with the experienced present is for popular uncritical unscientific thought in the real present. When, however, we discover the temporal lag of experience, we reckon as simultaneous with experience not all the things that are simultaneous with all experienced objects, but those which are simultaneous with some experienced

[1] I will later suggest another use of the term 'past' when properly qualified.

physical event in our proximity, as for instance the movement of the hands of a chronometer as successively pointing to index numbers on the dial. It is important, however, to note that here we have another meaning of the term present, different from that we have been employing. But failing to recognize this, we are put into perplexity with regard to the spatially remote experienced objects, which have heretofore been regarded as in the present. Many of these objects are long prior to the objects we reckon as present in the second sense. Now identifying 'past' with 'prior,' we proceed to speak of them as past, because they are indubitably prior to what is indubitably present in the second sense. We can avoid all appearance of contradiction and at the same time conform to the scientific use of the term 'past,' if we only distinguish between the physical (or scientific or mathematical) past and the empirical past. The physical past is prior to some empirically present physical occurrence, taken as the standard of reference, or to a number of such occurrences all physically simultaneous with each other.[1] The empirical past is what, having been experienced, lies behind the present span of experience, the present moment. *What is physically past may therefore without contradiction be empirically present.*

[1] I suspect that the source of the difficulty we have in keeping our notions of past and present clear is that we fail to bear in mind what I have called the solidity of time. Remembering this we should be able easily to distinguish between empirical and physical (or scientific or mathematical) simultaneity. Empirical simultaneity is the contemporaneity of experienced objects which are not experienced as successive, the unit of duration for this contemporaneity being any present moment. Physical simultaneity is simultaneity that results after discounting the differences due to different spatial distances and different velocities of stimuli, and after discounting also the 'personal equation.' Or to put it in terms of the parallelograms we used to represent the lag of perception, empirical simultaneity is the relation between events which lie on a line parallel to and lying between the sides of these parallelograms. Let us call any such line a line of empirical simultaneity. There is also empirical simultaneity among events in different parallelograms having the same base, *e. g.* the visual and the auditory parallelograms, when they lie on lines of empirical simultaneity which intersect at the base. Physical simultaneity is the relation between events which lie on any line perpendicular to the base. I may remark that such parallelograms are not merely imaginary ones conjured up for the purpose of a simile. They are real parallelograms of a hybrid constitution, having their bases in the temporal dimension of succession, and their sides in space. We touch here again upon the intercomplication of time and space, a subject which needs more study, perhaps with the aid of four-dimensional geometry.

The alleged contradiction is manufactured by the inflexible logician who is willing to operate with stiff categories alone, or to dole out just one niggardly meaning to any term.[1]

The reaches or stretches of space and time are, as we have seen, partitioned into parts. In space the termini of one-dimensional reaches are called points. The point does not *separate* one part of space from the next part. The next part begins *at the same point at which* the other ends. The adjacent parts are conterminous in the point which divides them. The point at which a part ends is not itself a part of that part nor of space, of which that part is a part. It is merely the *end* of that part. The point is indeed in the space-continuum, but it is not of the nature of the continuum; it has no stretch. "It has no length, breadth, or thickness." Hence space is not analyzable into points and a peculiar relation which holds between them. The alleged peculiar relation when identified turns out to be just space over again. Any finite line is indeed analyzable or distinguishable into length and the two punctual terminations of this length; but the *length* is not analyzable into points. No merely logical analysis of a line will give as result the infinity of points about which so much has been written of late in mathematics and philosophy. You can get points only by partition not by analysis of space. What so-called analysis does here is to suppose a line partitioned and repartitioned and so on without end. The termini of any possible parts obtained in this way are then offered us to contemplate as if they were analytical results. Logical analysis and geometrical partition are combined and confused in this procedure; the result is misleading. What arises only upon partition is regarded as having been there to

[1] This contradiction is not peculiar to time: a similar one can be trumped up for space. Let *abcd* be a parallelogram, *a* being the lower left hand corner, the base *ab* being relatively short, the sides relatively long, and the angle *abc* having a magnitude of about fifteen degrees. Draw a line *ef* parallel to *ab*, equidistant from *ab* and *dc*, and cutting the side *ad* at *g*. Let *i* be a point on *ef* just to the left of *g*. Now answer the question whether *i* is to the right or to the left of the parallelogram. It is obviously to the *right* of that part of the parallelogram which lies to the left of the perpendicular through *i* to the line *dc*. And yet we should all say unreservedly that it is to the *left* of the parallelogram, thus contradicting ourselves!

begin with, and what only upon partition yields points is supposed to be constituted out of such resultant points.[1]

What is true here of space is true also of time. Any natural division of time, such as that into years—with the exception of the moving durational units spoken of above[2]—results in successive parts which are literally next to each other. In the painful experience we shall have night after next of ringing out the old we shall likewise be ringing in the new year. There is no break, no interruption. The instant is a joint terminal of two relaying time-stretches. It interposes no interval between the two stretches; it marks them off without separating them. It effects a division without disjunction.

The analysis of time into uniquely qualitative instants with an asymmetrical transitive relation between them does not seem to take us one step forward. What is that relation between the instants other than time as duration, which was to be analyzed? What is the peculiar quale of the instants, distinguishing them from spatial points? If the quale is according to the theory of external relations to be found in the instants considered in abstraction from the relation between them I must report that I cannot find such a quale. The whole quale seems to reside in the distinctive *relation* between instants, and this relation is time as duration or a kind of stretch. What distinguishes time from space is not anything unique in the terminations of either; it is the unique kind of *reach* which in the one case is terminated in an instant, in the other in a point. An instant as a unique element to be obtained by analysis my analysis cannot obtain. For me the result is as if it were proposed to analyze duration into duration and something else not discoverable as described.

[1] Points differ from parts of space in that the stretch-character of the parts was in space before the partition took place, while the entire nature of the point consists in its being a termination of a part. Therefore the point comes into being only with the partition. *There are no points in undivided space.*

[2] This exception must be made because they are *moving* units. The present for instance has in one sense a next moment, that will have as its posterior terminus the instant that is its predecessor's anterior terminus. But before this next moment arrives, there will have been a continuous succession of moments no one of which is next each other: they overlap each other. Thus every moment has in one sense a next moment; in another sense this next moment is not the next. There is no mystery here; there is only difference of meaning.

When divisions are made in either the temporal or the spatial continuum, the *points* and *instants* which divide and connect the portions thus marked off are themselves *separated* from each other by parts of the continuum, by those parts namely which they terminate. No spatial point has a next point just because the point lies at the end of the line, and any other point lies at the other end of the line, which these two points severally terminate. The line may be redivided as much as you please; you will get as result a number of smaller lines, each lying as a stretch between its two terminal points. These points are intervalled by the stretches they terminate. But as we have seen the adjacent stretches are not intervalled by the point which jointly terminates them. Of the points thus obtained the propositions of modern mathematical analysis hold good; but such analysis does not tell us any thing about the nature of the space within which they lie, more than the fact that it admits of such points and that there are such and such relations among such points. Analysis deals only with the ends of finite spatial stretches, and the nature of space is in the stretch, not in the end of it. Hence modern analysis, when turned into a *metaphysical* account of space, is the play of Hamlet with Hamlet left out. Points are not *terms* of a spatial relation; they are *terminations* of spatial stretches. The same holds good of instants in time.

Our result makes it possible for us to give a brief evaluation of Bergson's treatment of time. We find ourselves in accord with him in his refusal to accept mathematical analysis as giving a true account of the full nature of time. And yet Bergson is mistaken in declining to recognize the existence of instants in time and the mutual externality of such instants. The temporal continuum is indeed not composed of instants; it contains moments which are continuous with each other in the sense that successive moments are not marked off from one another in such wise that one must have ended before another begins. The progression of the present is a continuous progression or a progression within a continuum. In Bergsonian terminology, the successive moments penetrate each other; they overlap. They do not come in discrete and disjointed

fashion, and the successive moments are not entirely external to each other. But there is a partial mutual externality in that the part of a preceding moment which is not part of a succeeding moment is external to the latter. Such externality is however compatible with continuity. While the temporal stretches in question lie on different sides of the same instant and are thus mutually external, the instant interposes no gap between them. Mutual externality does not mean necessarily an *externality between* mutual externals. Again, there is order in succession, else there were no dates, and dates Bergson himself must and does recognize. In time everything comes in its own turn. The mutual interpenetration is no confused jumbling. The melody to which Bergson so frequently refers has its distinctive character given to it by the order in which its constituent notes occur. Change the order and the melody is changed. A phonographic record of Schubert's Serenade played backward may give you some sort of music, but it is not the Serenade. The new qualities, however, such as tones acquire in the musical setting are not peculiar to the temporal order: in space also we have something similar in the contrast-effects of colors. A spatial redistribution of the colors on a canvas may give a different quality to each of the colors. In short Bergson's persistent attempt to differentiate time and space as one a non-externalizing continuum and the other a non-continuous externality fails. A continuum when partitioned becomes a medium of externality; the parts must be external to each other, else there were no partition. But partition does not mean separation by an impassable gulf.[1]

Bergson's capital error can best be brought out by showing how his illustration of change is defective. He invites us to "imagine a straight line of unlimited length, and on this line a material point $A$, which moves. If this point were conscious of itself, it would feel itself change, since it moves: it would perceive succession; but would this succession assume for it the form of a line? No doubt it would, if it could rise, so to speak, above the line

[1] If we had time to consider the paradoxes of motion we should likewise find a mixture of the true and the false, of the illuminating flash and of black night in Bergson's treatment.

which it traverses, and perceive simultaneously several points of it in juxtaposition: but by doing so it would form the idea of space, and it is in space and not in pure duration that it would see displayed the changes which it undergoes. We here put our finger on the mistake of those who regard pure duration as something similar to space, but of a simpler nature."[1] We think we can put our finger on Bergson's mistake. Why take a *point* which moves? Why not take a *line* or a geometrical *solid?* The illustration I should choose would be a diamond moving through a spectrum. It would feel itself change as it passes from one zone of light into another; and it would thus feel without having to rise above its line of march. Within its own moving length there would be room for the conscious play of change.[2]

But there is one modification of this illustration that is essential. The defect in it is the fact that the different spectral colors are already there and the jewel moves into what has been already existent; what it leaves behind still remains though left behind. Now suppose that the spectral colors arise as the stone passes through them and fade out as it passes them by. We have then a better illustration. But this illustration ceases to be a simile; it becomes an imaginary example. It presupposes just what it is meant to illustrate, that time is not space.

From all that has been said it will be seen that our experience of time has two aspects relevant to the appraisal of the temporal experience of the Absolute. Our experience is of events as before and after one another, and it is also an experience of new events and a loss from experience of old events. These two aspects are interrelated. It is difficult to see how an event can be *experienced* as after another if it did not *enter* the experience after the other. Temporal order is the order of occurrence; and to experience an occurrence as occurrence is to have it appear as

[1] *Time and Free Will*, p. 103.

[2] Bergson's present *is a point* in that it has no protension. But it is a point which moves without generating a line. Hence the past is always carried along in non-protensive form—except when his perception of reality gets the better of his intuition, as when he recognizes dates. Our past psychical life, for example, "survives—as we shall try to prove—with all the detail of its events *localized in time*" (*Matter and Memory*, p. 113; my italics).

a novelty in our present. The time-order in which experienced events *stand* is an order into which they *come*. Now the Absolute experiences the order in which events stand; but it fails to experience anything as novel or to feel any loss. Into the all-inclusive present of the Absolute nothing can enter: everything is already there. His time is therefcre untimed time. The very entirety of his vision of time detemporalizes what he sees. Make the time-span as long as you will, still keeping it limited, and the time-experience may still be sobered by loss or vivified by hope of gain. Make it all-inclusive and it becomes an experience from which the differentia of our time-experience has been eliminated.

To look forward with bated breath or to stand on tip-toe of expectation; to strain our eyes for the first blush of dawn after our sorrows have endured through a long night; to watch by the bedside of a friend sick it may be unto death, and have our hearts rise and fall with each unforeseen turn; to be stunned by the blow that falls upon a beloved child prattling by our side—in short not to know what is before us and to have our horizon change; to wonder, to hope, to fear, to be surprised, to be cast down, to be uplifted by the unanticipated; to be swept off our feet by time's tumultuous rapids or to be borne into some delicious unsuspected pool sparkling in the sunlight—such are the crises in which for all of us the experience of time culminates. The Absolute can have no inkling of what lies on the inside of such experiences. To see all at once is to fail to feel the temporal sequence as genuinely temporal. The Absolute lacks experiential verisimilitude: our time is an unredeemed promise, an unwreaked threat.

As the Absolute has no genuine future, he has no genuine past.

> All things are taken from *us* and become
> Portions and parcels of the dreadful past.
>
> All things have rest, and ripen toward the grave
> In silence; ripen, fall, and cease.

But for the Eternal Experience, and also for Bergson, time is not a medium in which losses are sustained. From us, though the years may bring the philosophic mind, they have taken the

hour of splendor in the grass, of glory in the flower. The clouds that gather round the setting sun *do* take a sober coloring from an eye that hath kept watch o'er man's mortality. Of all this, in the feel of it, the Absolute of Royce and the Time of Bergson wot not. They lack experiential verisimilitude: our time is relief and regret.

EVANDER BRADLEY MCGILVARY.

UNIVERSITY OF WISCONSIN.

# THE PROBLEM OF KNOWLEDGE FROM THE STANDPOINT OF VALIDITY.[1]

(SECOND ARTICLE.)

WE have already before us a number of propositions relevant to the problem of knowledge. Of these the first is that for purposes of inquiry knowledge be considered as a fact. In the second place it is important that the nature of this fact be not obscured by the prejudice which would identify knowledge uncritically with the scientific. Reasons have been given for the view that in determining the relation of knowledge and science we should take the former concept as generic and the latter as a difference within the former. Lastly it has been shown that among the characters which distinguish knowledge is one—that, in fact, which gives direction to the problem—validity, of which the significance extends far beyond the sphere of knowledge as such. Æsthetic and moral values are determinable by a form of validity specific to each province; and since the argument compels us to conclude that these values are knowable (although they derive nothing of their validity from the fact) it follows that in this department of knowledge (that, viz., which has to do with moral and æsthetic values) we have a close parallelism between the different, mutually-irreducible kinds of validity.

With regard to the first point it is clear from the ultimate failure of Kant to support his original premises that much depends upon the success of the attempt to specify the meaning of knowledge as given. That knowledge is given in the established sciences need hardly be disputed. But the general conditions of knowledge can never be determined by reference to the specific presuppositions of any limited group of the latter; and it is impossible to interpret *the given* in knowledge in the

[1] The first article of which the present is a continuation, appeared in the January number (1914) of the *Review*. A third article will follow during the present year.

sense of *the given sciences.* That is to say, even granted that the sciences are given knowledge, there is more knowledge given than is to be found in them.

The assumption of knowledge as a fact, required by the conditions of the problem, is thus seen, when unfolded, to lead to the second position—viz. the further demand that the distinction of the scientific and non-scientific be taken to determine knowledge not as a differential character but as a dichotomous division within the general concept. A question which arises at this point is whether, putting aside for the moment the knowledge which is non-scientific, we are entitled to consider the scientific character as ipso facto an indication of knowledge. This of course would be answered in the affirmative by those who maintain the identity—although the answer would fall short of their position, which requires rather the characterization of knowledge exclusively in terms of the scientific character. Conceding the minor demand and admitting (a somewhat generous assumption) that the scientific as such (and therefore that all that is scientific) is knowledge, we are now able to formulate in concise antithesis the position from which the problem will naturally advance. On the one hand: *Scientific, therefore knowledge;* on the other: *knowledge, yet unscientific.*

The form of the antithesis as well as the general position of the problem, as historically developed, suggests that the onus probandi will press most heavily upon the second possibility. It is the unscientific which is yet knowledge that will call for demonstration. The points to be avoided are at least determined for us.

First we must not refuse to accord a place in knowledge to the supposed "elementary" forms of experience. If (the last of our three general conclusions) the problem of knowledge is a specific development of the problem of validity, the *αἰσθήσεις* which, if they are granted at all, must be on every theory whatsoever and from every point of view acknowledged in some sense *κυριώταται*, cannot be excluded from *γνῶσις*.

In the next place, if the distinction of the scientific and the non-scientific is to be maintained in any real sense, it will not do

to make the epistemological value of the latter entirely dependent on that of the former. In other words, we must not interpret non-scientific knowledge merely as an imperfect or incomplete form of scientific and as owing its validity exclusively to this character. The Greek tendency to emphasize the distinction by cutting out the actuality of sense experience from the realm of knowledge altogether is not more unsound than the modern tendency to absorb one member in the other. Of course it is not contended that an 'ordinary' fact or rudimentary piece of experience owes nothing of its significance as knowable to its capacity for scientific interpretation, but only that it does not derive its character as known from such capacity. And it must be added that great difficulties underlie the assumption that in the profoundly obscure transition from experience to science what we have is our ordinary unscientific knowledge—only more of it and better known. Rather, having regard to the indisputable fact that the transition involves loss as well as gain, it seems not unwarrantable to interpret the nature of knowledge in general as genuinely bi-polar—the non-scientific extreme being signalized by its own intrinsic limit or superlative, whether in the form of κυριώταται τῶν καθ' ἕκαστα γνῶσεις or in some other form. Clearly if we are to accord any meaning to the Aristotelian phraseology in this instance, we are dealing with a kind of knowledge the validity of which is not to be defined in terms of an imperfect approximation to the scientific limit.

The uncritical identification of knowledge and science has been promoted by the reduction of all apprehension to a single type of synthesis, which is manifest alike in the most rudimentary act of recognition and in the most advanced scientific combinations. The further interpretation of this idea which is necessary in order to give it application to the epistemological problem is that the true judgment, which presumably constitutes the form of knowledge, always in the last resort implies the union of a de facto sense element with a genuine ideal qualification. What exactly this latter signifies will be made clear in an instant. But in the first place it must be remarked that the insuperable difficulties to which, as will be shown, the view gives rise, so far

as epistemology is concerned, are probably traceable to a confusion between the conditions of validity (that is, the conditions which determine whether a judgment will hold) and the conditions of apprehensibility (such, *e. g.*, as intelligibility and consistency) which precede the question of validity and prepare the judgment for the latter.

For the view that the nature of knowledge is to be found in the ideal qualification of experience it is natural to turn again to Kant. The expression "genuine ideal" has been chosen to represent a demand which he makes of the strictest knowledge, but which he does not succeed in formulating without confusion. When Kant raises the problem of knowledge in connection with the question whether knowledge is to be found in metaphysics, he is obviously guided by two considerations. The knowledge of which he is in search must on the one hand possess the certitude of demonstration, and on the other it must represent actualities, (and for Kant the actualities of knowledge are determinable only in experience) not ideas.

Now in accepting mathematics and the mathematical sciences as the type of what he desired, Kant is misled at various points. In the first place, even granting that he is right in maintaining the intuitional as against the abstract formulation of the mathematical object, the correction does not help him to the extent which he supposes in the task of uniting the actual of experience with the demonstrative character of the a priori. The mathematical object is defined as the *formal* intuition, which there can be no mistaking for the empirical. If therefore the science of mathematics is to furnish the type of real knowledge, it will be necessary to conceive the formal intuition as intuited, in the sense of being actually experienced; and this of course, as has been indicated, is an impossible demand. Only in one particular are the two identical. It is the same space which conditions them both and which they both define. From that there can be no escape; and for this reason, in spite of the fundamental ambiguity which now appears in the term, it is impossible to find any other designation for the non-empirical object of mathematics than that of the formal *intuition*. The contention, however,

that mathematical truth derives its demonstrative character from the fact that we construct its object a priori according to a rule must now be understood in a purely ideal sense. That is to say, the construct in question is an ideal character, not presentable even in the imagination, far less in the actuality of an experience.

When Kant latterly concedes the ideal character of space as opposed to the original notion (in the "Æsthetic") of an infinitely extended given whole, the reference is obviously to space as "die Form der Anschauung" and not to "die formelle Anschauung." But it is equally apparent that the formal intuition is itself in the nature of an Idea of Reason. Mathematical objects, the line, the circle, etc., as well as the relations in which they stand (such, for example, as equality) are all absolute and limiting cases, determinable presumably by an extreme application of the laws of homogeneity and specification—themselves acknowledged to rest upon Ideas of Reason.

A further feature in the Kantian presentation which, if not in itself a confusion, seems indicative of one, is to be detected in the tendency to conjoin the ideas of universality and necessity. No doubt this is in a sense legitimate; but it helps to conceal the extent of the divergence between the knowledge of experience and mathematical knowledge, by seeming at times to characterize the difference as that between a proximate and an absolute universality. As a matter of fact the question of extension has very little bearing on the point. The plurality of which ideal mathematical objects admit is as indefinite (though in a different sense) as that of any empirical order or kind; and there is no more force in interpreting the uniformity of structure in the sense of a universality of instances than there would be in claiming epistemological preference for the latter.

We are here concerned with the Aristotelian μαθηματικά, which we have good reason for identifying with the Platonic "intermediates," constituting, it is almost certain, the third division in the similitude of the line.[1] But the mediatorial

[1] This view proceeds on the assumption that Professor Jackson's theory (*Journal of Philology*, Vol. X) is not tenable.

character of these μαθηματικά is almost too obscure to help us materially in the transition from sensation to knowledge. Mathematical objects on the one hand, it is true, are completely determinate in their character. On the other, they may be conceived to constitute a plurality of uniform natures. Of what avail is this fact for the content of mathematical science? It is only in the realm of experience and the experiential sciences that crucial issues in knowledge may turn upon the universal character of a plurality. The epistemological significance of universality is always lost before we reach the region where universality can be established on principle. Or, we might say, the notion of plurality as involved in the problem of knowledge varies fundamentally in significance. Where its significance is (or may be) crucial (viz., in the realm of experience) it appears chiefly in the form of a problem: where the problem admits of most adequate solution it is found to be of least significance. Not until mathematical science can with reason pretend to answer the questions of experience in the sphere of validity are we entitled to assume the former as an available intermediate between experience as such and the ultimate issues of knowledge that arise out of the latter. Of course it is not intended to deny either the connection itself or the importance of the connection between the judgments of actual experience and the formulation of demonstrative scientific truth. The point here is that having regard to the question of validity (the question at issue) we cannot pretend to understand the connection and that the grounds on which a meeting-place was sought for the empirically real and the demonstrably certain are themselves demonstrably invalid. It is doubtful whether and how far an experiential datum is *ever* capable of ideal qualification in the absolute sense; and it is a serious question whether a genuine ideal is ever really predicable of anything but an idea.

These conclusions are not affected by the undoubted existence of sensitive relations of some sort between the two poles of knowledge—where, for example, on the one hand, purely demonstrative science employs the objects of experience in order to reach ideal conclusions, and, on the other, the knowledge which begins

and terminates in the *de facto* of experience frequently passes from the one limit to the other through a succession of purely ideal terms.[1] Or again we are confronted with the remarkable case in which the same piece of knowledge seems to reduplicate itself in mathematical and experiential terms. The center of gravity is a mathematical point, determinable by purely mathematical considerations: at the same time it is a physical and physically significant character in an actual material body, determinable by experiment. Compelling as such instances are, they must be regarded from the standpoint of validity as indicating a problem rather than a conclusion. Even in the sphere of causal relation, which, as Kant rightly maintained, involves the union of a conceptual form and an empirical content, it would be difficult to show that, where general propositions are concerned, the reference is ever to fact not already in some sense idealized, or that our judgments can truly be expressed in any but a hypothetical form.[2]

If the right construction has been put upon these enigmatic instances and we are correct in maintaining the bi-polar character of knowledge, the way seems open for certain conclusions as to

[1] It is worth while noticing the qualifications under which Kant introduces the relation of experience to the Ideas of Reason—the asymptotic nature of the approach to the latter, their *undefined* validity, the fact that it is *a possible experience* for which they furnish rules—although at the same time they act as heuristic principles in the elaboration of an actual experience. These various features are found together in the following passage. "Was bei diesen Principien merkwürdig ist, und uns auch allein beschäftigt, ist dieses, dass sie transscendental zu sein scheinen; und ob sie gleich blosse Ideen zur Befolgung des empirischen Gebrauchs der Vernunft enthalten, denen der letztere nur gleichsam asymptotisch, d. i. bloss annähernd folgen kann, ohne sie jemals zu erreichen, sie gleichwohl als synthetische Sätze *a priori* objective, aber unbestimmte Gültigkeit haben, und zur Regel möglicher Erfahrung dienen, auch wirklich in Bearbeitung derselben als heuristische Grundsätze mit gutem Glücke gebraucht werden, ohne dass man doch eine transscendentale Deduction derselben zu Stande bringen kann, welches, wie oben bewiesen worden, in Ansehung der Ideen jederzeit unmöglich ist."—*Krit. d. rein. Vern.* "Anhang zur transscendentalen Dialectik," B. Erdmann's fifth ed., p. 498.

[2] This view will suggest a direct contrast to Schopenhauer's theory of causality, which insists that the causal relation has to do exclusively with the immediately present in space and time. The point of the contrast is that Schopenhauer naturally locates the causal relation (interpreted as given in an intellectual intuition) at the opposite pole from that to which it would belong if interpreted as tending, in the Kantian sense, to an ideal universality.

the form the problem will now assume. Taking as the generic concept in our definitory formula the idea of validity we should naturally seek to determine the differentiating character which separates the validity of knowledge from validity in general; and this in effect would probably amount to distinguishing the concept of valid knowledge from that of validity in other specific senses. It is beyond the scope of this paper to discover exhaustively and exactly either the genus or the differentia required. But certain distinctions ought to be indicated.

Since responsibility is held to fall only where knowledge is present or possible, knowledge must be allowed some sort of determinative force (at least that of a condition) in the moral universe. On the other hand, from the standpoint of validity, strictly considered, it is impossible that the specific quality of knowledge or of knowability should be at the same time the specific quality of moral value as such. Kant's argument for the purity of the moral concept will hold against the intellectualistic as well as against the hedonistic formulation of ethics.

Again, just as knowability is a condition of the effectuality, but not the real differentia, of moral value, so there is a moral factor involved in knowledge. This factor may be expressed in various ways. Thus it is or may be a duty to seek knowledge. In this case the acquisition of knowledge appears as the object or content of moral endeavor. Furthermore the condition under which knowledge is attained may be and constantly is the universal condition of moral effort. The credit which redounds to the man who succeeds under this condition is of course in part moral credit. It is obvious, however, that the value represented in these aspects of the case is something intrinsically distinct from the epistemological validity of the knowledge involved.

In the same way it will be found impossible to reduce the character of epistemological validity to what is peculiar in the non-moral forms of good. These may be summarized under the heads of utility and æsthetic value; but, although knowledge can be brought under both categories and both are conditioned by knowability, neither the one nor the other constitutes the specific quality of knowledge. Of course there is a knowledge

of what is useful, as there is a knowledge which distinguishes what is useful from what is not; and such knowledge is itself useful and a condition of the effective realization of other utilities. But the knowledge of what is useful does not warrant us in generalizing the utility of knowledge, far less in identifying the utility of which knowledge is a condition with the validity which constitutes knowledge what it is. And if it is the nature of a utility to be always relative to something beyond itself, it is seen how little applicable this designation is and how much more truth there is in the Aristotelian view that connects the character of knowledge in the end with the ultimately fundamental distinction of the practical and the theoretical.

Again, the relation of æsthetic and epistemological values is somewhat analogous to the relations which have been considered. Knowledge and its opposite may be legitimate subjects of æsthetic judgment; but from the standpoint of their peculiar validity they gain nothing from the connection. In the same way æsthetic value involves knowledge of the beautiful, but is not reducible to the character which makes such knowledge valid. Rather, we must suppose, the validity of knowledge in the sphere of æsthetics implies the correct apprehension of a sort of judgment which has to do with a completely independent standard of values.

From these negative conclusions it is difficult to derive much in the way of a positive characterization; but it may not be lost labor only to have made good the claim of knowledge to represent *the strictly theoretical form of validity*. It may be objected that such a definition fails to distinguish knowability from thinkability. The reply to this is that while the distinction is thoroughly valid, it is important to see that we realize exactly wherein the distinction consists. The point is that while the content of what is thinkable may not be knowable under certain categories—the existential category, for example, or that of actual experience—the very fact of thinkability (and a fortiori that of necessary thought connection) implies the element of knowability and actual knowledge somewhere. In this case there can be no valid thought that does not at the same time imply

valid knowledge—the condition of realizing this with exactitude being (as will be shown later) the ability to eliminate the subject and predicate really involved.

With this partial definition of epistemological validity in view, then, a special feature arising out of the present inquiry must now be noticed. The concept of validity, like the concept of knowledge itself, will, on the present hypothesis, be determinable by the capacity to include under an identical formula the difference of the scientific and the non-scientific. The question therefore to be answered will be: What is implied in a validity which can be predicated in the same sense of the knowledge present in an actual experience and the demonstrative knowledge never realized in experience at all?

It is possible in a few words to indicate some of the features relevant to our inquiry and involved in the question. In the first place, if we admit the independent validity of a knowledge present in experience but non-scientific in character, this of itself suggests that the validity of such knowledge will be measurable by its capacity to sustain meaning other than the meaning of scientific interpretation or reinterpretation. The condition here demanded might be brought under the heading of two summary questions: (1) How can I know the object present before me without knowing it in a scientific manner? and (2) How can I have a scientific knowledge which is yet not a knowledge of the object actually presented to me?

To begin with, no epistemological advantage will be claimed for particularity; and so far as experience is concerned, it may as well be made clear that the view taken of it is the ordinary one that if it contains knowledge it does so in virtue of its power to unite a universal element with the particularity of actually experienced sensation. On the other hand the mere combination of the universal and the particular (which may be regarded as a minimal requirement in knowledge, equivalent to the Aristotelian dictum that the question of truth first arises in the judgment) does not entitle us to establish any real unity of type between the knowledge of experience and the knowledge of science.

In exhibiting the continuity of knowledge, idealistic theories have not given sufficient weight to the different modes in which the universal is applied. The particular experience which, when analyzed, is found to be already universal, is not so in the sense in which universality is claimed as the distinguishing character of scientific knowledge. In place of a uniform type (embracing the whole range of epistemological values), there are three significant moments to be noticed. First there is the investiture of the experienced object with universal significance. Under this heading may be included all that is covered by the terms acquisition of meaning, complication, recognition, classification. Now it is true that the processes indicated by these terms are just the processes by which science in some of its developments advances, and are perhaps in their psychological aspect involved in a uniform manner in all knowledge whatever. But it has been pointed out that uniformity in the process of apprehension does not imply uniformity in the conditions of validity. And, if we take the terms referred to on the side of their objective significance, it will be found that there are important differences to be reckoned with when we pass from the immediacy of experience to the general aspects of the latter and from these to the demonstrative sciences.

To follow the line of our previous argument—the first difference might be indicated by pointing out that so far as the question of validity is concerned the significance of the judgment of experience at the particular level turns upon the right of the individual subject to accept a certain universal or conceptual qualification. There is here no question of universal *propositions*. And upon examination it appears that the designation of the predicate in singular judgments as universal is a somewhat artificial expedient, the point at issue being not so much that of finding membership for the subject in a uniform plurality as of finding significance for the individual experience. On the other hand and secondly, in the case of what we might roughly classify together as the generalizations of experience and the non-demonstrative sciences, the universality of the subject or of the proposition as a whole may very well, as we have seen, be the crucial point on

which the question of validity turns. In the third place when we come to the demonstrative sciences the universality of the subject or of the proposition (though in this case still a possible method of characterization) has lost all significance for the question of validity and is rather a corollary of the latter than the point at issue.

These conclusions enable us to give some sort of answer to the two questions regarding the possibility of a distinctively non-scientific and a distinctively scientific knowledge. The non-scientific knowledge, of which there is undoubtedly a certain amount present in experience as such, is independent of all questions relating to the validity of universal judgments. The only point involved is the interpretation of the object present in experience; and this in turn we have seen to imply not so much the finding of a place for the object in a universe of similars as the significant designation of the presentation itself. There is more in the distinction than might appear. The condition of knowability in such cases is really to be found in a certain proportionateness of the interpretative to the presented element. No exception need be taken to the ostensibly mechanical separation of the two elements implied in the idea of a proportional relation. Admitting, as we are bound to do, the complete saturation of the sense datum with ideational significance, this does not prevent us recognizing within the experience a limit inside of which interpretation is safe and beyond which it loses the secure character of knowledge. There seems to be no way of accounting for this transitional quality in the epistemological value of our significant experiences other than that of attributing it to a difference in the mutual adaptation of the presentational and ideational ingredients. If this is so, then, as has just been said, we have here at last a condition of knowability in the province referred to; and all that remains is to examine the general factors that determine where and how the transition shall occur.

The most obvious consideration is the fact that the limit is far from fixed, being both indefinite and changeable. Advancing knowledge tends to carry the boundary line with it. But this will have no effect upon our conclusions which are of

the most general nature, and will hold independently of such variations. Nor must it be forgotten that the whole tenor of the argument has been to show that there is a kind of ideational qualification (that which we have designated genuinely ideal) which in any case cannot be regarded as in any intelligible sense applicable to the de facto presentations of experience.

A convenient way of finding the limit within which experience, as uniting a sensational and an interpretative element, may be considered to possess the sure character of knowledge, would be to take a typical case of error or uncertainty—that is, an instance in which interpretation has proved incommensurate with the datum presented—and, eliminating the disqualifying features, to trace back the experience to the rudimentary form of which there can be no uncertainty because it constitutes in this case the positive basis both of doubt and of error. Here at least in some sense we can claim to know.

The usual view of such knowledge, however, gained by elimination, is that it is too wanting in import to call for consideration. If this is so, the position is serious in view of the stress which has been laid upon significance as an element in knowledge. The difficulty has the merit of directing attention to a distinction which cannot be passed over here, but which, unfortunately, appears to possess all the character that makes for irreconcilable division of opinion.

A. A. BOWMAN.

PRINCETON UNIVERSITY.

# THE STANDPOINT OF PSYCHOLOGY.[1]

THE problem of the standpoint of psychology is a perennial one. Here at home it has been under almost constant consideration for a quarter of a century; the presidential addresses delivered before the Psychological Association have frequently contributed to its discussion; it has already been considered in a joint session of the two associations present today; and it is a subject that will doubtless occupy the mind of our successors as long as interest in the nature of mind continues. It might at first sight appear that this question is one that concerns psychology only, that the problems involved belong solely to the technique of that science and are to be decided exclusively by considerations of convenience and utility in the course of its detailed procedure. It is undoubtedly true that it is impossible to prescribe in advance the methods to be employed in any inquiry. The mode of hypothesis which may be found essential at any particular point, and the provisional abstractions to be adopted, are questions that can be determined only in the light of the special problems under investigation. But it is possible to make a distinction between such problems of special method and the question regarding the general aim and standpoint of a science. In the case of the physical sciences, the general standpoint and logic of their procedure is definitely formulated in the series of propositions that we know as the mechanical theory. In developing consistently this standpoint, these sciences abstract from all individual differences and qualities, reducing physical phenomena to relations existing between quantitative units. This mode of inquiry has for its object the precise formulation of certain *general* aspects of the material world that are regarded as fundamental for the purpose in hand. The result is found to apply to particular physical

[1] Read as part of a Discussion before a joint session of the American Psychological and Philosophical Associations, January 31, 1912, at the New Haven meeting. A number of changes and additions have been made.

things with sufficient accuracy for practical purposes, but it is not, and is not intended to be, a direct description of individual things.

Now when we approach the problem of psychology, there are two questions that may fairly be raised, which are not at all questions regarding special method or technique. Would results analogous to those obtained in the physical sciences satisfy the interests and legitimate demands of psychology? That is, have we a right to ask from psychology anything more than an exact account of the general conditions of mind expressed as quantified terms and relations? The second question is whether the difference between mental life and physical reality is of such a character as to render an identical, or even closely analogous mode of treatment impossible in the two cases?

In attempting to answer the first question, I think it must be admitted that a genuine interest leads us to demand a formulation of the *general* nature or conditions of mentality, and also that this formulation shall be expressed in the most accurate terms possible. The purpose of such laws, assuming that they can be obtained, would seem to be identical with the laws of the physical sciences: they are primarily instruments for the control and prediction of behavior. But quite apart from the question whether general psychological laws can be applied to individual cases with anything approaching the certainty that obtains in the case of physical laws, it cannot be maintained that psychology has no other interest or goal. The primary psychological interest, I venture to believe, seeks to understand *individuals*, our own mind and those of others; and to understand individuals is to know them from the inside as centers of experience. When, on the other hand, we speak of the 'phenomena' of the physical sciences, the word connotes precisely the fact that the objects dealt with are not taken to possess any inside center at all: their 'value,' is extrinsic to them, being derived from the initial assumptions and hypotheses of the inquiry. Now, assuming for the present that general laws of the same type as those of the natural sciences can be obtained in psychology, it is important to recognize clearly that here as there abstraction is the price

that has been paid for the exact form of the result. In psychology, moreover, we appear to leave out of account just what is most essential and significant: we abstract from all individuality and treat the person as a series of phenomena. It is worth noticing in this connection that from this point of view the central principle, the self or ego, is excluded by *a priori* considerations, not on empirical evidence. There cannot be any such principle, just because the standpoint is committed in advance to deal only with existences or 'phenomena' of the type already described.

Now, at a later point I shall raise the question whether any such a natural science of mental states is possible, whether all such assumed general psychological laws are not at bottom cases of physiological uniformities. Whatever may be the answer to this question, I am here insisting that laws of this type do not exhaust the possibilities or satisfy all legitimate demands of psychological inquiry. There is a form of intelligibility of a different type from that afforded by the logic of the natural sciences. That the latter type of uniformity alone can form the basis of science was, indeed, the assumption that led Kant to his limitation of knowledge to phenomena. But the historical significance of Kant's work consists precisely in the fact that he made evident the necessity of categories that lay outside his own formal table.[1] The same logical assumption also underlies Bergson's sharp contrast between Reason and Intuition. But against any such theoretical limitations of 'knowledge' or 'logic' as Kant and Bergson assert, one can always point in reply to the form of intelligibility actually attained in history and the kindred group of sciences, in other words, to the achieved logic of the century that has elapsed since Kant's death. It is an anachronism, then, to maintain that a science of psychology demands the discovery of uniformities *of the same type* as those of the natural sciences. To comprehend the world of mind, the realm of experience, is to discover the universal in the form of *individualized experience*. And such a universal cannot take the form of a quantitative uniformity, or abstract concept. What is sought

[1] Cf. Creighton, "The Copernican Revolution in Philosophy" in this *Review*, Vol. XXII, pp. 133 ff.

from this point of view is the 'idea' or concrete form of the mind, a form of universal that permits of and indeed presupposes different opposing yet mutually complementary individuals expressing themselves in diverse purposive systems. Moreover, this 'idea' of mind as a concrete universal is not a formula that has eliminated time, or that refers only to a cross section of mind at a particular moment, as is true of the 'natural science' type of uniformity. It is concrete in the sense that it looks before and after, comprehending the 'idea' that unites the different stages of a developing process. It is insight in terms of such a living mind that is presupposed in most of our concrete dealing with our fellow men. It is explanation from this point of view alone renders history intelligible to us. Moreover, it would appear that psychology of this individualized form is needed both as a guide to educational practise and to the efforts directed towards social improvement. Whenever and wherever the interest is in *human* relationships, the 'phenomenal' or 'natural science' categories are incapable of expressing what we want to know; only a psychology of real human beings can afford light or practical guidance in this type of inquiry.

It appears necessary, therefore, to recognize that there may be two, or even several distinct methods of investigating the mental life, the standpoint and procedure in each case being determined by the purpose that underlies and guides the investigation. The question of course still remains as to whether all these are to be called 'psychology,' and if not, which form of inquiry may with best right claim the name. Miss Calkins has long contended for the 'double standpoint' in psychology; and Külpe has lately suggested the possibility that psychology may in the future be divided into two branches, one type being more closely connected with the physical sciences, and the other belonging more distinctly to the mental sciences.[1] It is evident that no complete agreement on this whole subject has yet been attained; but it would nevertheless appear that we have reached a

[1] I have not seen Külpe's article "Psychologie und Medizin" (*Zeitschr. f. Pathopsychologie*, Band I, 1912), but have taken this statement from F. Hillebrand's paper in the *Zeitschr. f. Psych. u. Phys. d. Sinnsorgane*, Band 67, p. 18.

stage in the discussion where there is something approximating to consensus of opinion on certain important points. The discussion has led us to see that the natural science standpoint has no exclusive or superior claim as a method of studying the mental life. And, secondly, it has impressed upon us the necessity of recognizing clearly the aim and purpose of the different modes of inquiry in order to avoid the errors that arise from a confusion of categories. Moreover, I think that we demand more emphatically than formerly that the results obtained by any method shall have some concrete significance. To decide what constitutes concrete significance may be a point upon which it would be difficult for us all to agree; but we do recognize that psychology, like all the other sciences, has a social responsibility for the character of its results. These agreements would seem to constitute a long step in advance; indeed, something like a new era in the history of modern psychology.

The second question that I have proposed concerns the possibility of an existential science of psychology, that is, a science based on the ideal of intelligibility that obtains in investigations of the phenomena of external nature. What does a natural science of mind presuppose? It presupposes that mind is an existential mode of reality, a stream of actually existing conscious processes or states, temporal though not spatial phenomena, which can be found embodied at a particular moment in a form as definitely assignable as that which belongs to the objects of the physical world. This general mode of thought, together with the notion of elements, and the type of analysis which this notion carries with it, are all included in the doctrine of psychology as a natural science. As is well known, the term that plays the major role in this type of system is sensation, so that it is customary to speak of this account of mind as sensationalist psychology. Now, without referring to any of the special difficulties to which this standpoint gives rise, or dwelling upon the fact that there are fundamental disagreements among those who hold it as to how the elements and relations of the mental life are to be represented, it seems possible to question the whole set of assumptions on which the standpoint rests. Psychologists

have a favorite method of discounting results that differ from their own: they suggest that these are evidently 'logical' constructions rather than genuine psychological observations. Now something may be said on occasion both for observation and for logic; but does either one or the other support the doctrine of mental states as modes of existence?

If appeal is to be made to observation, the question is whether introspection actually discovers an inner world of existing phenomena. This question is not a new one, but in one form or another has been raised on many sides. In a paper read before the Philosophical Association three years ago Professor Woodbridge argued against the common view of the reality of sensations. And a similar view was suggested by Professor A. E. Taylor in the joint discussion between our Associations at Cambridge eight years ago. Mr. Taylor, while maintaining the affiliation of psychology with the natural sciences, said: "If we are to hold rigorously to the distinction [between individual and over-individual objects], must we not at least lay it down that there is no such a thing as the psychology of cognition since the immediate objects of cognition (sense-qualities, physical things, memory images, universal concepts) are all *ueberindividuelle objekte*, while, as to the unique processes by means of which individuals cognize these objects, it may at least be doubted whether careful introspection reveals certain evidence of their existence; *i. e.*, it may be that what we call the psychology of cognition is a mere temporary stepping-stone to the cerebral physiology, on the one hand, and the logic, on the other, of a more scientific future."[1]

The point of the objections that are being brought against the natural science type of psychology, as I understand them, is directed against the account of mind in terms of existing inner processes or objects. The reality, not of the mental life, but of its alleged existential modes, is called in question. Existential science, it may be maintained, finds its limits in the physiology of the nervous system; since the most careful observation fails to find any world of inner objects that can be analyzed and

[1] *Philos. Rev.*, Vol. XV, p. 384.

related as are the objects of the physical order. The life of mind is a realm of judgment, value, and appreciation, a life of activity and interpretation. The description of the mind in terms of psychical objects is a pure fiction, the result in part of carrying over and duplicating internally the various attributes and aspects of external objects, and in part of representing the phases of our internal experience in symbols analogous to those which we employ in describing these objects. This criticism of the ordinary psychological standpoint goes farther than the contention of Bergson that the inner life has been distorted by the assimilation of time to space; it separates in a still more radical way the life of mind from outer objects by denying the relevancy in the former sphere of the entire existential point of view. That is, Bergson does not go farther than to maintain the continuity and non-mechanical character of the mental life, leaving it to be conceived as still possessing some kind of a temporal mode of *existence*. But the reality of the appreciative life does not base itself upon existences of any sort, whether continuous or discontinuous. To be in consciousness is *eo ipso* to be judged, interpreted, used. There is therefore no meaning in the metaphor of an existing state or image as a necessary *prius*, or 'bearer' of a meaning. Meaning is not a secondary intention, as it were, of the mental life: experience when taken directly and concretely is itself made up of purposes and values. It is of course impossible here to do more than indicate the nature of the issue. But one must admit that psychology has no longer an unchallenged right to the claim that introspection reveals an inner world of existing states of consciousness. The evidence of the professed expert or trained observer is called in question, and cannot be regarded as conclusive in itself. What is at issue is clearly something that cannot be determined by bare observation; it is a question of categories, or of the standpoint of interpretation, and this can be settled only by a comprehensive view of the nature of experience as a whole.

It is, however, maintained by some that the *logical* interests of science require that the purposive life shall be broken up into a series of internal objects and described from the existential point of view.

No one has put more convincingly the appreciative and evaluative character of concrete mental life than Professor Muensterberg. Yet he maintains that the psychologist is required by a *logical necessity* to transform the world of values and meanings into a series of inner individual objects that can be described and determined from the existential point of view. Now a few years ago I was inclined to accept this doctrine of Professor Muensterberg, both because it seemed satisfactory in itself, and also because, as it appeared to me, it afforded a practical distinction and *modus vivendi* for philosophy and psychology. At present however, I feel inclined to question—not dogmatically, but inquiringly—both the necessity and the value of this particular mode of transforming the concrete experience. I was long ago convinced that there is no path from the purely existential standpoint to that of values, from psychical states to logical or ethical appreciations; and I therefore have never been able to regard the natural science account of mind as an actual description of the concrete experience of individual life. It is, however, possible and often necessary to pass from the concrete to the abstract, *i. e.* to adopt abstract analysis as a *means* to further concrete intelligibility; but, it is necessary to repeat, the transformation into abstract terms can never be an end in itself: it is justifiable only when the process of abstraction serves to promote understanding and to facilitate control. No one can doubt that analysis of some sort is indispensable to scientific understanding of the mental life; but is it necessary to adopt the existential form of analysis? Why assume that understanding demands everywhere the same unvarying form of result? Moreover, when one has once recognized that the concrete character of mind manifests itself in terms of value, how is it possible to break this life up into terms so radically different in nature? For the transition from the one mode of reality to the other cannot be accomplished by any ordinary process of abstraction. The passage is not effected by simply selecting and omitting certain elements; but it is, as Professor Muensterberg names it, a 'transformation,' a passage into another genus.

I find further grounds for doubting whether the transformation

of the mental life into terms of existence is really indispensable in the fact that Professor Muensterberg does not bestow upon the constructed series of inner objects the full rank and efficiency of an existential order. That is, he demonstrates, very convincingly, I think, that the scientific conception of causality can have no application to this order of psychical objects. Causal explanation must be found outside of the psychological objects in the corresponding brain events. It seems pertinent to ask; Why, then, construct this order of psychological objects? It would seem that we are compelled in the last resort to go to brain events, to brain physiology, for the final statement of the laws of a psychology that has been assimilated to the methods of the physical sciences. What advantage is there, then, in interpolating psychical states or existences between the physiological processes and actual experience?[1] I cannot at present see why one may not look to the cerebral physiology of the future for an account of the general existential conditions of mentality in non-individualized form. It is in terms of brain physiology, I am inclined to believe, rather than in terms of states of consciousness, that the natural science of the mental life is to be written. It is undoubtedly true that such a science of brain physiology cannot be constructed without observation of the concomitant changes and modifications of consciousness. It might therefore properly enough be named physiological psychology, or psychological physiology. Whatever name is applied to this mode of inquiry, it is of fundamental importance to distinguish its method and purpose from what I have called concrete psychology. The one mode of inquiry is directed toward the discovery of the universal in its abstract generality, expressible in quantitative terms; this is the method of knowing

[1] In the Discussion of which this paper was a part, Professor Muensterberg stated, if I understood him correctly, that he no longer holds that this procedure yields the only necessary form of psychology. He maintains, however, that a science of psychology of this type is demanded by practical rather than by purely logical reasons,—*i. e.* because it is necessary to apply it in such fields as education and medicine, etc. This point is one that requires further discussion; but Professor Muensterberg's statement renders some of the criticisms in the text inapplicable to his present view. I have let these criticisms stand, however, as applying to the general theory.

things from the outside, as phenomena, or modes of existence. The other type of investigation, working, as it were from within, seeks to comprehend its subject matter in terms of a different kind of universal, a concrete individualized universal that expresses itself in the form of purposes and ideals.

In discussing this subject, it should not be forgotten that a psychology of the latter type is something more than an unrealized proposal. The great historical systems of psychology have in the main been written from this standpoint, and many of the most fruitful psychological investigations of our own time have been obtained by the employment of these internal categories. The whole series of works that have appeared on social psychology, and on the psychology of language, myth, and religion are concerned with individualized forms of experience.

Moreover, even in so far as this type of psychology remains an unrealized program, it yet is seen to represent a genuine need of concrete knowledge. For the demand for psychological insight is just a demand to understand the values and purposes of ourselves and others, and the functions through which these are realized. Reference has been made frequently to the service that psychology is able to render to medicine, and especially to nervous pathology, and it has been claimed, I think, that it has been able to render this service because it has adopted the form of a natural science. Even if this claim is quite justified, however, the fact should not be overlooked that in so far as psychology has limited itself to the abstract point of view its results have declined in significance, not only for philosophy, but for history and the whole group of humanistic sciences. It should not be forgotten that the standpoint determines the nature of the results: if one sows abstractions, one must reap abstractions. Psychology has had to pay a heavy price for its independence of philosophy in the decline of genuine human interest in the character of the results which it has attained. Nevertheless, I believe that since our discussion at Cambridge, eight years ago, psychologists have become increasingly aware of the relation of their science to humanistic fields of inquiry, and of the responsibilities that such a relation entails.

And, as a consequence of this new emphasis and interest, psychologists are likely in the future to rank themselves with the humanists rather than with the representatives of the natural sciences. Even at the present time we have a considerable number of psychological treatises whose affiliations, both as regards subject matter and method of analysis, are with philosophy and the historical sciences.

There are two difficulties which are often urged against the possibility of a personal or individualized type of psychology. On the one hand, doubts have been expressed regarding the attainibility of scientific analysis from this point of view. And, secondly, it is asked how it is possible to delimit such a type of psychological inquiry, how it can be differentiated from the various philosophical disciplines like logic and ethics, or even from the social and historical sciences. I will refer only briefly to these questions.

That every science must employ analysis is undoubtedly true. But it is equally true that analysis is not an end in itself, that not every or any mode of analysis is a step toward intelligibility. Analysis, to be helpful, must be significant; and it is significant only when it is guided by a synthetic purpose or idea of the conditions of intelligibility in the specific field of inquiry. Now it is often said that the strength of the 'natural science' psychology lies in the definiteness of its analytic procedure. This alleged definiteness is, however, a result of the existential point of view that is adopted by this inquiry, and merely expresses the fact that the psychical elements and terms are pictured in a quasi-material form. The essential question is as to the mode of synthesis, the mode of intelligibility, to which this analysis leads up. We have already seen that the 'natural-science' synthesis expresses itself in terms of abstract general laws, and that psychology is compelled to recognize another task, that of rendering intelligible the inner appreciative life of the individualized form of experience. In fulfilling this task, then, psychological analysis must be set forth in terms of the activities and functions through which the individual expresses, maintains, and develops his life. Analysis, from this standpoint, distinguishes and

describes the system of means and instrumentalities which the self employs in solving its various practical and theoretical problems. The problems of mind at its primary level concern the maintenance of life and the control of bodily movements. Since the mind is continuous with the principle of life, the maintenance of life is, as it were, its primary end, and bodily movements and adjustments are its indispensable instruments. The living body, from this point of view, is not a complex of bodily existences, but a teleological instrument, an implicit individual, that is realized through the development of consciousness. It is because of the continuousness of life and mind, and because it is life that thus sets the first problems for mind, that the analysis of the biological functions affords the essential clue to the analysis of mentality at this stage. If the interest in psychology were limited to these more elementary functions, the psycho-physical organism might, rightly enough, be taken as the unity in the terms of which psychological analyses are to be expressed. But the development of mental life involves a transcendence of the ends set by the living body, and the creation of a scale of values that have no direct reference to the well-being of the bodily life. Moreover, the process of mental development leads to a point where the direction of bodily movements is not the sole, or even the most characteristic, function of mind. The main emphasis of the address that Professor Judd delivered as President of the Psychological Association a few years ago was directed to show that the development of mind reveals a continuous creation of ends and means, in which, and by means of which, its functions take on a new form and significance. The psycho-physical life is taken up and used as an instrument in so far as it is capable of rendering service; but life which has attained its individualized form in self consciousness has created language and is concerned primarily with problems that transcend the psycho-physical level.[1]

It does not seem to me that this fact has always been borne sufficiently in mind by those who have employed the psycho-physical method of analysis. In describing the functions of

[1] C. H. Judd, "Evolution and Consciousness," *Psych. Rev.*, Vol. XVII, pp. 77 ff.

mind that belong to its more highly developed stage by means of terms and analogies drawn from the earlier level, there is, I think, a certain advantage. In this way the continuity of life and mind are rightly emphasized. But the disadvantages arising from a failure to recognize differences as they appear are equally obvious. The employment of the same terms carries with it the tendency to overlook the fact that, in the process of development itself, a new type of problem has been evolved, and that one is therefore not confronted with an unchanging type of situation. For example, there is something analogous to biological habit in the higher mental life, but this is also different in important respects from biological habit; or again, it must not be forgotten that terms like 'adjustment' or 'activity,' if employed to describe phases in the solution of an intellectual problem, are not to be allowed to commit us in advance to pragmatism by the importation of their more usual connotation. By interpreting functions exclusively at the level of bodily movements and adjustments, fundamental differences and distinctions are obscured.

On the main issue, then, I agree with the position taken by Miss Calkins, that psychological analysis is most concrete and adequate when it is expressed in terms of a self. Such a conception may well include, as she suggests, all that is valid in psycho-physical functionalism, while at the same time avoiding the tendency to interpret what is specifically characteristic of mind by means of biological categories. It appears to me, however, that Miss Calkins, as she proceeds, tries to combine two incompatible standpoints. Having reached in her argument the functional point of view of a self, she turns her back upon the categories and form of analysis which this view involves, and insists that the account of mind must still be written, at least in part, in terms of existential elements. The main purpose of the self-psychology thus seems to consist in introducing new elements, which are indeed more pervasive and ubiquitous than those commonly recognized by psychologists, but which are still, like the latter, existential structural units. It is new elements, not a new point of view, that one finds at the end of her series of articles in the *Journal of Philosophy*. Or at least there is a

failure to realize how completely the concept of the self transforms the natural science standpoint. This appears clearly, I think, from the statement in the concluding article of the series. "This proposed description of consciousness, in terms of the characters of the conscious self," Miss Calkins writes, "cannot take the place of the so-called structural analysis of consciousness into elements. On the contrary, the structural analysis, *which is common to all forms of psychology*, must supplement the description peculiar to self-psychology. From the structural standpoint, consciousness, though conceived as self, is regarded (spite of its inherent relatedness and persistence) as if in artificial isolation from surrounding phenomena, and as if momentary. The results of the analysis of consciousness, thus conceived, are the so-called elements of consciousness."[1] Another passage in the same article states that "the analysis into elements is an analysis of the self's consciousness when the self is conceived without reference to other selves or to its own past or future."[2] But what meaning can be given to a self that is thus reduced to a mere *punctum stans*, a bare existence? What is the necessity, one is bound to ask, of making such an abstraction, and how in detail does the abstract form of analysis subserve intelligibility in this case? I am not maintaining that what Miss Calkins calls structural analysis is never necessary or useful; but I do hold that from the point of view of a self-psychology it is not to be regarded as an end in itself, *coordinate* with the other form of analysis. It has a meaning and justification only as an instrument, a temporary abstraction that is demanded by the interests of the concrete analysis, and the results of which must be translated into the terms of the main inquiry. Thus, for example, if one were to undertake to analyze the character of any form of thinking, it would doubtless be necessary to introduce as a subordinate part of the main procedure what might be called a structural examination of the mental imagery involved. But this examination would not constitute an independent inquiry: it would be significant only when, by annulling the temporary abstrac-

[1] *Journal of Philos.*, Vol. V, p. 113. Italics added.
[2] *Ibid.*, p. 120.

tion, it were again included as a subordinate, though integral part of the main body of results.

The self, if it is to furnish a fruitful concept for psychology, must be regarded as something more than a point of reference. Miss Calkins's main difficulty seems to arise from the fact that, in her view, the self remains on the sensational, existential plane. It cannot, therefore, attain to genuine universality. As an appreciative self, indeed, it is not thus isolated and particularized, but looks before and after, and stands concretely united to a real world of persons and things. But it would seem as if Miss Calkins believes that the self, in order to validate its claim to reality, must be capable of being found by the type of introspection that seeks and finds only *modes of existences*. The whole question as to what introspection actually yields is, of course, involved in the present discussion. Miss Calkins has insisted that introspection affords us knowledge of various kinds of relations, and reality feelings, thus extending the possibilities usually assigned to it; but she fails, I think, to look at the universal and objective aspects of mental life, evidently assuming that whatever is real must be embodied in some particularized existential form, and that it is this that gives us assurance that it is no mere creation of the fancy. This, however, is to subordinate the appreciative standpoint to the existential, which is, I think, quite opposed to the real spirit of her contention.

There is another point of great importance in connection with the question of the analysis of experience which I can the more readily pass over with a mere mention, because it is likely to receive attention from other speakers who are to follow and who are more competent to discuss it. That is the question of the value and character of the psychological analysis effected by comparative and historical studies of the objective manifestations and products of mind. It would appear that the tremendously important results that are obtainable from these sources are contributions to the psychology of the appreciative individualized form of mind, rather than to an analysis in terms of structure. If this be true, the resources of analysis that the former has

at its command are almost infinite, and may well compensate for the greater diffculty of applying experiment from this point of view. As is well known, however, experimentation has already been successfully employed as an instrument for effecting this type of analysis in certain fields, so the dividing line is not that between an experimental and a non-experimental psychology.

There remains the objection that such a type of psychology as I have been discussing would have no definite limits or boundaries, that it would lose itself in philosophy, or in history. Perhaps no better protocol for the discussion of this question can be found than Bacon's reminder that the distinctions of the sciences must not be conceived as absolute gulfs and divisions, but only as veins and markings in one continuous body. Division of labor and distinction of categories are, of course, essential to progress in scientific work; but at the present time it is perhaps even more important to seek for some principles of integration and unity. I believe that not only psychology, but all the sciences, require to be humanized and rendered concrete, as Bacon and Comte pointed out, by being brought into relation to the life of humanity. When dissociated from philosophy and history they are no better than dead branches severed from the parent trunk. It is inadvisable, then, to fix absolute divisions or to attempt to determine the limitations of the different sciences on purely formal grounds. If the conception of unity and supplementation is preserved as the guiding idea, this will itself operate as a principle of division of labor. A formal or *a priori* delimitation of the different sciences is lacking in the flexibility and capacity for adjustment that is demanded by the changing conditions and relationships of a growing body of truth. In particular, it is essential that the connection between philosophy and psychology that has in recent years been somewhat weakened should be restored and strengthened.[1] A close intimacy and

[1] It is interesting to refer in this connection to Wundt's references to Hegel at the end of his essay in the Kuno Fischer Festschrift (*Die Philosophie im XX Jahrhundert*, 1907) as setting the ideal of a concrete knowledge of mind towards which the psychology of the future must advance. In his recent brochure entitled *Die Psychologie im Kampf ums Dasein* Wundt also emphasizes the necessity of a close relation between philosophy and psychology.

a constant give-and-take association is essential to the fruitful development of both these subjects. This is not the place to attempt any account of the division of labor that seems to be called for at the present time.[1] The lines of division will, as I have said, grow out of and be determined by the demands of this close association, probably taking new directions from time to time as the inquiry advances.

J. E. CREIGHTON.

CORNELL UNIVERSITY.

[1] This subject has been treated ably by J. R. Angell in his paper entitled "The Relation of Structural and Functional Psychology to Philosophy" (*Chicago Decennial Publications*), and also more or less explicitly by Dewey in several writings.

# PROCEEDINGS OF THE AMERICAN PHILOSOPHICAL ASSOCIATION; THE THIRTEENTH ANNUAL MEETING, YALE UNIVERSITY, NEW HAVEN, CONN., DECEMBER 29–31, 1913.

## Report of the Secretary.

THE thirteenth annual meeting of the American Philosophical Association was held at Yale University, New Haven, on December 29, 30, and 31, 1913. The Treasurer's Report for the year ending December 31, 1913, was read and accepted after being audited by Professors Marvin and Coe.

Edward G. Spaulding, Secretary and Treasurer, in account with the American Philosophical Association.

*Debit.*

| | |
|---|---|
| Time account | $354.75 |
| Interest to January 1, 1913 | 9.81 |
| " " " 1, 1914 | 11.01 |
| Check account, January 1, 1913 | 87.24 |
| Dues received | 156.00 |
| | $618.81 |

*Credit.*

| | |
|---|---|
| Expenses:— | |
| Columbia Meeting | $ 33.55 |
| Clerical Services | 37.69 |
| Stamps and stamped envelops | 26.94 |
| Stationery | 4.60 |
| Telegrams and miscellaneous | 6.08 |
| Printing | 42.36 |
| | $151.22 |
| Total time account, January 1, 1914 | 375.57 |
| Check account, Cash on hand | 92.02 |
| | $618.81 |
| Total Cash on hand, January 1, 1914 | $467.59 |

Audited and approved.

Walter T. Marvin,
George A. Coe.

The following officers were elected for the ensuing year: *President*, Professor J. H. Tufts, of the University of Chicago; *Vice-President*, Professor W. H. Sheldon, of Dartmouth College; *Secretary-Treasurer*, Professor E. G. Spaulding, of Princeton University; *Members of the Executive Committee*, to serve two years, Professors C. M. Bakewell, of

Yale University, and W. T. Bush, of Columbia University; to serve one year, Professor I. W. Riley, of Vassar College.

Upon recommendation of the Executive Committee the following new members were elected: Professor Edward S. Ames, of the University of Chicago; Professor Albert Balz, of the University of Virginia; Dr. Albert R. Chandler, of Harvard University; Professor George Cross, of the Rochester Theological Seminary; Professor J. F. Dashiell, of Waynesburg College; Mr. Henry L. Eno, of Princeton, N. J.; Dr. Edward F. Guthrie, of the University of Pennsylvania; Professor E. C. Moore, of Harvard University; Professor William L. Raub, of Knox College; Professor E. C. Wilm, of Wells College; Professor James H. Woods, of Harvard University; Dr. William K. Wright, of Cornell University. Associate members: Mr. William R. Warren, of Harvard University, and Mr. Douglas C. McMurtrie, of New York City.

The Executive Committee reported that no invitations had been received for the next meeting. Professor Lovejoy announced that the Political Science Association, which meets at Chicago in December, 1914, was desirous of meeting with the Philosophical Association in order to confer on the philosophical aspects of law. On motion of Professor Lovejoy the Association referred this matter to the Executive Committee with power, yet with instructions to arrange such a meeting, if possible and advisable.

On motion of Professor Pitkin it was RESOLVED,

I. That the Executive Committee be authorized to organize at its discretion, branches of the American Philosophical Association upon application for such action by members of the Association resident in or near the place of organization.

II. No branch society thus organized shall be allowed to elect members to the Association nor to itself.

III. No branch society shall be allowed to hold a meeting within two weeks of the date on which the current annual meeting of the Association shall be held.

On recommendation of the Executive Committee it was voted that, beginning with this year's meeting, the Secretary's travelling and living expenses incurred by attending the meeting be defrayed by the Association.

Professor R. F. Alfred Hoernlé, of Armstrong College, New Castle-on-Tyne, and special lecturer at Harvard, addressed the Association with reference to the International Philosophical Congress to be held at London in the summer of 1915. Members of the Association are

urged to attend this Congress and to send titles of papers to the Secretary, Dr. H. Wildon Carr, More's Garden, Chelsea, London, S. W.

Professor Gardiner, of the Committee on Early American Philosophers, reported progress and the committee was continued.

The appreciation and thanks of the Association were expressed to Yale University, and especially to Professors Bakewell and Hocking, for their generous hospitality at this meeting.

Respectfully submitted,
EDWARD G. SPAULDING,
*Secretary.*

## SECRETARY'S REPORT OF THE JOINT MEETING OF THE AMERICAN PHILOSOPHICAL ASSOCIATION AND THE AMERICAN PSYCHOLOGICAL ASSOCIATION, HELD AT NEW HAVEN, DECEMBER 31, 1913.

The meeting of the two societies was called to hear the report of the committee appointed to ascertain the facts regarding the resignation of Professor Mecklin from the faculty of Lafayette College. Professor H. C. Warren presided. Professor W. V. Bingham was appointed secretary. The report of the committee was presented by its chairman, Professor A. O. Lovejoy.

On motion of Professor Spaulding it was voted that the report be accepted and printed at the expense of the two societies and that copies be sent to all members of these associations, to the editors of scientific journals who may care to publish the report, and to such other persons as the executive committees of the associations in conjunction with the members of the committee may designate.

On motion of Professor Overstreet the associations adopted a cordial vote of thanks to the committee for the completion of a piece of work which stands so finely for the honor and dignity of the teaching profession.

W. V. BINGHAM,
*Secretary.*

The following are abstracts of the papers read at the meeting:—

**Existence, 'Value,' Reality.** W. M. URBAN.

Distinguishing between a 'narrower' and a 'broader' use of the term value, the first making value dependent upon existence, the second seeking to reduce existence and truth to forms of value, the writer takes them up in turn and reaches a negative conclusion with regard to both. As to the first, value can certainly be legiti-

mately predicated of subsistents as well as existents, and in all probability of some objects that are neither. There seem to be objects whose 'mere determination as objects' (such as the 'perpetuum mobile,' 'unmixed happiness,' 'perfect being') are sufficient to insure interest and value. With regard to the second, it is held (criticism of Pragmatism and Imperativism) that existence and truth can be shown to be independent of all values, *except* the value of truth. But unless we can show that value is presupposed *in some other sense than that already implied in the concepts of existence and truth*, we are ultimately landed in tautology. In general the concept of logical values, of existence and truth *as* values, and not merely *having* value, tends to be an argument in a circle.

In view of these negative conclusions, and also of the contradictions that arise when value is spoken of itself as either existing or subsisting, the claim is made that value (its objectivity in some sense being for the moment taken for granted) is a *third kind* of objectivity, like existence, but in certain important respects distinguishable from both existence and subsistence, and reducible to neither. It is not a 'what,' but a 'that,' not a quality but an 'objective.'

Arguments for this position are: (1) that, if value may be predicated not only of objects that are existent or subsistent but also of such as are outside both these classes, then it follows that *value 'is'* (whatever that means) when the *objects 'are not'* in either of the two above senses of the word. (2) More important is the argument that value is not a quality, not a 'what,' but a 'that.' According to a very common view, such qualities as the good, the beautiful, the pleasant, etc., are identified with value, and likened to secondary qualities. But these are no more the value than the sense-data are the existence. *Through* them we apprehend the value, that the object 'ought so to be,' or 'is worthy to be so felt.' Because a thing is called valuable, it has no new *quality;* it is precisely because of its qualities that it is valued. Its 'what' is raised into the sphere of value, just as by the existential judgment it is raised into the sphere of existence. The fallacies that result from the concept of plurality of values (value, like existence is one) are due to this error.

The problem is then to distinguish value from existence and truth. On examination of certain non-psychological and ontological definitions of value, such as value is 'that which is worthy to be,' or 'ought to be on its own account,' the conclusion is reached that they all disclose an imperfect 'potentialization' of the emotional subject. When we say, for instance, that 'the gold of California had value for the

inhabitants at a time when it was still undiscovered,' or that justice would have value for men, even if there came a time when no one appreciated that fact, we are confusing 'value itself with a truth proposition about the relation of value to a subject.' The latter is timeless, like any other truth proposition, but the value itself '*was not*,' and 'would not be,' whatever this use of the verb to be may be later found to mean. It lies, then, in a nature of value as such to imply valuation. Its objectivity does not lie in complete independence of an emotional subject. But an examination of value does disclose an a priori element that determines its objectivity and marks it off from existence and truth. It lies in the nature of value as such that it demands of all objects whatsoever that they shall lie somewhere in a scale of values. Just as to every 'object' in the widest sense of the word existence or non-existence must be predicated, so for us also, must every object find its place in a scale of plus or minus values. The relation of higher and lower is, moreover, the *essence* of value. Given any three values of whatever sort, one of them must be in the middle. The fact of our inability to determine the values, does not affect the principle. Though empirically incommensurable, values cannot be so, ultimately, without destroying the very essence of value. This, it is held, lies in the very nature of value as such, is a priori and self-evident. When it is contended (Russell, Liebmann) that in such propositions as 'happiness is better than misery,' 'life is better than death,' etc., part at least is a priori, they are right, but it is only the element here described. All else is empirical.—Value, then, though a form of objectivity, is unlike existence and truth in that it is inseparable from an emotional subject (valuation) and admits of no such thing as an isolated value (as there may be isolated existents and truths.) It is however fallacious to speak, as some have done, of this objectivity of value as 'imperative existence' or 'being for will.' This means always pseudo-existence or subsistence. The only way is to recognize a third form of objectivity. In this connection a doctrine of 'value judgment' is developed, which aims to meet recent attacks, especially that of Croce.

What finally can be said of the relation of value and existence? First of all, existence should not be identified with reality. Value *does not* presuppose *existence*, but it *does* imply *reality*. Recognizing the great world of objects that do not exist, and yet have interest, it has a meaning to speak of 'a prejudice in favor of existence;' but a prejudice in favor of reality is a contradiction in terms, interest implies reality in some sense. The writer argues for the inseparability of this

value connotation from the concept of reality, upholds the doctrine of degrees of reality, maintaining that it follows from this inseparability. *Existence*, however, as such, as merely apprehended, is valueless, just as value is non-existent. Existence *becomes* a value, however, when, as distinguished from non-existence, it becomes a criterion of reality. There are many objects (their nature and extent being of course a matter of empirical determination) in the case of which existence is better than non-existence, and sometimes non-existence better than existence. In such cases existence becomes a value (as also may truth) in that it is the necessary presupposition of value. The point of importance is that in the last analysis value is its own guarantee. That in certain cases it is related to existents is an empirical fact requiring investigation like any other empirical relations.

It may be said, then, by implication, that a theory of existence could be developed independently of a theory of value, though not a theory of reality, for the latter is inseparable from value. Moreover, if this be true, since there is no such thing as an isolated value, since the relations of values are 'internal,' a theory of reality also implies an 'internal' theory of relation.

**The Empirical Determination of a Value Scale.** E. N. HENDERSON.

The purpose of this study is to try to find out by actually questioning many persons how much agreement there is among them as to the relative importance of certain values and also, if such agreement be found, what the order of their importance may be. To that end I have used a list of six values, which may, perhaps, be regarded as inclusive of the principal good things of life. They are health, property, sociability, intelligence, taste and morality. The persons who helped in the study were asked to comply with the following request:

"Arrange the following list of misfortunes in the order in which you would be least willing to incur them:"— (1) To be chronically ill so as to be confined to the bed room; (2) To be dependent upon others for support; (3) To have no friendly relations with nor personal interest in others; (4) To be a person of defective mental power; (5) To lose all interest in the beautiful; (6) To lose conscience so that habitual thievery would cause no remorse.

It will be noted that personal qualities rather than the good things that can be gained and enjoyed through them have been selected, and that in each case the basis of comparison is what might be called the minimal standard amount of each value, or that the possession

of which is expected of every normal individual. These conditions, I think, favor simplicity in the study.

The replies of 183 persons may be represented as follows:

| Rating. | I | II | III | IV | V | VI | Average Rating. | Average Deviation. |
|---|---|---|---|---|---|---|---|---|
| Morality | 84 | 42 | 37 | 14 | 4 | 2 | 2. | .92 |
| Intelligence | 56 | 73 | 30 | 15 | 8 | 1 | 2.17 | .88 |
| Sociability | 27 | 25 | 50 | 48 | 26 | 7 | 3.23 | 1.12 |
| Property | 4 | 18 | 25 | 34 | 77 | 25 | 4.3 | 1.67 |
| Health | 11 | 11 | 21 | 33 | 25 | 82 | 4.61 | 1.34 |
| Taste | 1 | 14 | 20 | 39 | 42 | 67 | 4.68 | 1.11 |

Miss Catharine N. Platts, a student in the Summer Session at Columbia, obtained for me 120 responses. Her questions were similar to mine, except that the one regarding property was put in such a form that the idea of dependence on charity was not implied. Her question put the alternative as such poverty as to involve actual want. The result was that property dropped to the lowest place in the scale of values. The summary of her replies as is follows:

| Rating. | I | II | III | IV | V | VI | Average Rating. | Average Deviation. |
|---|---|---|---|---|---|---|---|---|
| Morality | 53 | 30 | 27 | 7 | 3 | 0 | 1.9 | .87 |
| Intelligence | 30 | 42 | 23 | 20 | 3 | 2 | 2.4 | .99 |
| Sociability | 18 | 15 | 33 | 34 | 15 | 5 | 3.2 | 1.10 |
| Health | 19 | 21 | 18 | 16 | 29 | 17 | 3.5 | 1.51 |
| Taste | 0 | 9 | 9 | 31 | 25 | 46 | 4.9 | 1.23 |
| Property | 0 | 3 | 10 | 12 | 45 | 50 | 5. | .75 |

Summarizing the results of both tables, we have:

| Rating. | I | II | III | IV | V | VI | Average Rating. | Average Deviation. |
|---|---|---|---|---|---|---|---|---|
| Morality | 137 | 72 | 64 | 21 | 7 | 2 | 1.99 | .89 |
| Intelligence | 86 | 115 | 53 | 35 | 11 | 3 | 2.27 | .92 |
| Sociability | 45 | 40 | 83 | 82 | 41 | 12 | 3.21 | 1.11 |
| Health | 30 | 32 | 39 | 49 | 54 | 99 | 4.19 | 1.6 |
| Property | 4 | 21 | 35 | 46 | 122 | 75 | 4.6 | 1.01 |
| Taste | 1 | 23 | 29 | 70 | 67 | 113 | 4.7 | 1.09 |

I conclude that there is considerable agreement in regard to these minimal standard values. Morality and intelligence are clearly at the top with a slight advantage in favor of the former. Sociability is quite as definitely in the third place. Health, property and taste are grouped closely together, with little advantage in favor of any one. If lack of property means dependence on charity, this value seems to come up to fourth place. Otherwise it drops back toward the bottom. Taste is at or near the bottom in any event. Health, as is shown by

the average deviation, is placed most variously, yet it is clearly a low value.

The results are in one sense partial, inasmuch as 283 of the 303 answers came from women. However, the summary of the 20 replies from the men gives exactly the same arrangement of the values as is found in the summary of replies collected by me.

It, of course, remains to be discovered whether the same arrangement will prevail for values above the minimal standard but at about the same relative level.

**History vs. Value.** M. R. COHEN.

In opposition to the rationalism which is supposed to be typical of the eighteenth century, the nineteenth century developed a mode of thought generally called historicism. The essence of this mode is the assumption that the only and complete explanation of things is to be found when they are seen as the last terms of temporal series. The radical adherents of the historical method in the social sciences frequently claim that it transcends and renders unnecessary the standpoint of valuation, and thus deny any truth to the assertion that the value of a thing is independent of its history.

Though historicism professes to be empirical and realistic in temper, all its arguments are a priori, presupposing the perhaps incompatible propositions (1) that the nature of everything is manifested only in temporal series, and (2) that the past completely determines the present. A close examination, however, of the actual attempts made in economics, jurisprudence, ethics, politics, religion, and philosophy to substitute history for the old deductive methods of valuation shows that in no case have such attempts succeeded. No one, of course, can deny that history is a genuine mode of extending our experience; but the historical knowledge of situations is, as a matter of fact, frequently irrelevant to their practical evaluation.

The 'lessons' which people have drawn from history have all been derived by assuming the very values which are supposed to be proved by history. The assumption that the good or valuable always triumphs in the end is simply the old dogma 'that this is the best of all possible worlds' translated into a temporal form.

**Value and Existence in Art and in Religion.** H. M. KALLEN.

Analysis shows that value consists in a relation between the mind and any object of awareness—a relation such that the mind, the object and it constitute an interest. Value is the distinctive content

of interest. Its existence turns primarily on the existence of mind which is the referent, rather than object, which is the relation in this triad of terms and relation. So far therefore as mind exists value exists; value, indeed, is an existent among other existents, just as red is an existent among other existents, and things may gain or lose value just as they may become or cease to be red. Now mind is a complex of reflexes, instincts, impulsions and feelings all of which cannot be realized at once: in terms of the 'value-relation,' not every referent in the complex called mind can lend its appropriate relation. If it could, or if the referent could be destroyed, there would be no problem of values. The referent is not however destroyed. Unsatisfied desires, impulsions and interests survive as repressions. Such repressions give rise to ideas in which they are expressed, partly and vicariously realized. These ideas are 'value-forms'—essentially wish-fulfilments, ideal reconstructions of the unsatisfactory and repressive environment into satisfactory forms. They appear first as dream, but objectively they become the imaginings which in history are art, religion and philosophy. Of these three philosophy is the purest and freest, inasmuch as it handles no material of experience, but rather restates experience in purely human or ideal terms. Philosophy is almost identical with value, being most intrinsic and abstract. Throughout its history it posits five value-forms the existence of which it seeks to *prove*. These are the unity, spirituality and eternity of the world, and the immortality and freedom of the human spirit. They are non-existent, ideal compensations for the shortcomings of existence. Art and religion seek to make them existent. Art does so by reconstructing objects according to the standards they set: it compels value to become an existent, and in its objects, as they are encountered in the esthetic experience, it exhibits all these value-forms as existences. Religion simply defines value as existence, and makes the value-forms magically operative upon existence. Religion, hence, is essentially compensatory, and when it ceases to be compensatory, becomes art.

**Social Factors in Value.** J. H. TUFTS.

An analysis of the social factors in value may afford light upon two problems of present discussion: (1) the content of the value predicate; (2) the objective character of values.

1. While the content of such values as beauty, good, etc., is unique, and not definable in terms of anything else, it is none the less true that it arises in a definite situation. Assuming that the fundamental

aspect of the valuation process is a selective activity of the organism, we find that responses to stimuli tend to differentiate into two general sorts: toward the more stable, simple sort, reaction becomes habitual; toward the more variable, complex sort, greater attention with constant readjustment is necessary. Objects of the former sort become things. Objects of the second sort take their place in a bi-focal or social situation. Likewise in the case of certain of these objects, their stimuli find peculiar responses already prepared in the social instincts of the organism. When completely developed this situation results in consciousness of persons and of self. Economic values arise in connection with attitudes toward things; æsthetic, moral, and religious values, and values of personal affection arise in situations of the social sort. In the several kinds of these social situations peculiar enhancements, distinctive planes or levels of consciousness, are reached which are experienced severally as unique values.

2. These experiences give rise to judgments of value which may be stated in two forms. (*a*) I want (or men want, or there is a demand for) wheat; (*b*) wheat is worth $1 a bushel. (*a*) I admire the Parthenon; (*b*) the Parthenon is beautiful. (*a*) I approve justice; (*b*) justice is right or good. It is noteworthy that the economic value is in modern times recognized to depend upon the market, that is upon wants, whereas the æsthetic and ethical value is objectified. This seems to correlate with the fact that in a judgment upon things we do not embody value of the relation in the object, whereas in the quasi-personal or personal attitudes implied in æsthetic and ethical values we do so incorporate the value. The objective character of certain of the values is also correlated with the generality of the situation. In economic values no generalizing is implied except the numerical one of the market, the price 'bid and asked.' In personal affection values we may seek the reinforcement of a group consciousness of other friends but do not necessarily expect the same personal attitude of all spectators. In moral, æsthetic, and religious situations we generalize the attitude. It is something demanded of all. This goes along with incorporating the value in the object. Language, social art, group action and group judgments all prepare the way for this but it is in itself a unique attitude.

**A Neo-Realistic Conception of Value.** W. P. MONTAGUE.

Value is the status acquired by any object, existent or non-existent, in virtue of its capacity to satisfy an interest. An object that has the value-status may be called *a value*. All values are susceptible of

intensity or degree and of extensity or number. Values are divisible into secondary and primary. Secondary values such as economic or mathematical are objects which satisfy subsidiary interests or requirements such as those of the market or those of an algebraic equation. We shall not be further concerned with secondary values. Primary values such as ethical and æsthetic are objects which satisfy the fundamental interests of conscious life.

There are three types of interest possessed by conscious beings: (1) cognitive, (2) affective, (3) conative. Objects or values that satisfy these interests are respectively believed, enjoyed and desired. Each of these three types of value is further divisible into an empirical or subjective and a rational or objective phase which may be, but need not be, mutually exclusive. Thus: (1) Cognitive value is divisible into the apparent or sensible and the true or logical. (2) Affective value is divisible into the pleasant, or hedonic, and the beautiful or æsthetic. (3) Conative value is divisible into the desired, or impulsive, and the desirable or ethical. The satisfaction of each of these primary interests consists in a specific and not further definable equilibration or conformity of individual and environment.

The conformity of the beliefs of the individual to the environment gives cognitive satisfaction. The conformity of the environment to the desires of the individual gives conative satisfaction. The mutual and spontaneous conformity of the environment and the feelings of the individual gives affective satisfaction. Whether an object possesses any of these three types of value depends jointly upon the nature of the object and the nature of the individual. But the relative importance of the object and individual is different in the three cases. (Æsthetic values are not further considered.) Cognitive value, or truth, depends primarily on the nature of the existing environment, while conative value or goodness depends primarily on the nature of the conscious individual. *From which it follows that a theory of cognitive values depends upon a theory of existence, but not upon a theory of consciousness, while the theory of conative values depends upon a theory of the nature of the conscious individual, but not upon a theory of existence.* Whatever appears to sense is probably true or real except in so far as it conflicts with the totality of other appearances, but whether it does so conflict is determined by the nature of the environment and not by the nature of the conscious individual. Whatever is desired is as such desirable or good except in so far as it conflicts with the totality of other desires, but whether it does so conflict is determined by the nature of individuals and not by the nature of the

environment. Individuals are many but the environment is one. Therefore, ethical values are relative (what is good for one may be bad for another); but logical values are absolute (what is true for one may not be false for another). The relativity and plurality of ethical values is limited by the fact that it is absolutely desirable for each that the maximum of all desires should be satisfied. The absoluteness and monism of logical values is limited by the fact that there exist many relatively inconsistent appearances of the one self consistent reality.

**Values and Experience.** J. F. DASHIELL.

Changing from a view of the petrified achievements of man's intellectualistic life to the standpoint of naïve daily experience, we find ourselves in a world not so much of persistent and ponderable stuffs as of promising and threatening agents and forces. This dynamic changing is the inalienable character of the world we experience. It stands over against us in a positive way; and by virtue of the friendliness or unfriendliness of the different active agents toward our organic purposes and interests, they are the data out of which the world-perspective is really made—values. Experiencedness = meaningfulness, hence experienced content = values. It follows then that our objects or 'things' are certain constancies of import that have been seized and emphasized by the living mind. The dynamism so characteristic of all experience is referable partly to the environmental or extra-organic, partly to the subjective or organic factors (speaking relatively). This whole point of view now furnishes the basis for answering various questions raised during the past year.

Is the concept of value irreducible, ultimate? Since values are primary in every sense in human experience, the category is a primary one. The distinction between 'values' and 'things' in a given moment's content is after all only a relative distinction dependent upon the purpose in hand; and the conception of hard and fast things as set over against values betrays the ghostly influence of the concept of substance.—Is consciousness necessary to the presence of values? Since the limit between conscious and unconscious has not been definitely determined either in animal behavior or in human social life, the question is irrelevant or unimportant. But awareness in an acute degree does enter in moments of evaluation.—Does evaluation modify and create values? Education in all its branches gives an unhesitating affirmative; indeed, this efficiency of evaluation is at the very base of the development of all reflective or intellectual life of man.—The

distinction of subjective-objective is really traceable to the act of evaluation: if a simple experience of value be later analyzed into elements distinctly referable to the organic and to the extra-organic, we call them the subjective and objective elements respectively. But, strictly speaking, value, to be such, must be experienced in its uniqueness and immediacy.

**An Empirical Definition of Value.** W. H. SHELDON.

The present conflict of views makes it desirable to seek a definition. If this is not to be circular it must define value in terms of what is other than value, *i. e.*, actuality. It must be sought empirically, if it is to apply to the values we are conversant with. All cases of value belong to one or more of the following classes: Sensual (Urban's "condition worths"), economic, æsthetic, moral, religious, intellectual. In each of these we find by analysis of data that the value consists in the furthering or hindering of some given tendency. What does this is from the point of view of that tendency good or bad. Value is thus defined in terms of a factual category—viz., potentiality. Every value which is not merely imagined but felt as a working influence is such a potentiality, tending to realize itself. With any particular value, there is no necessity that it be anything more than a potentiality; with an all-inclusive value, potentiality would pass into actuality. This agrees roughly with the Ontological Proof, and explains why the propositions which ground all knowledge—the axioms—are objectively true and not mere postulates.

**The Definition of Value.** R. B. PERRY.

The indefinability of value is argued on two grounds:

1. Value is adjectival rather than substantive, so that nothing is universally and exclusively valuable. But it does not follow that the value predicate is indefinable.

2. Value is simple and unanalyzable. But one finds no value-quale as a residuum in experience; and without a definition of value no light is thrown on its polarity, comparative magnitudes, etc.

Value is said to consist in the relation of harmony or fitness. But the value here does not lie in the relationship as such, but in its beneficence, or in the intellectual or æsthetic interest taken in it.

Value is defined as the typical or universal. But the typical has value only when it typifies value, as when there is an intellectual or æsthetic interest in the typical. Similarly degrees of universality coincide with degrees of value only when the universe is assumed to be

the value-maximum, or when there is a philosophical interest in universality.

Value may be defined as the pleasure-pain state. But this view has usually been defended on the ground that only pleasure is liked and only pain disliked, which is equivalent to the view that it is liking and disliking, rather than passive pleasure and pain, that are determinative of value. And it is now recognized that there are other things beside pleasure and pain that are liked and disliked.

Finally, value may be defined in terms of like or dislike, as the fulfilment of interest.

1. This may be regarded as a sufficient definition without further qualification. Various questions arise. (A). Which is fundamental, desire or feeling? There is no absolute difference, since I seek to prolong what I enjoy, and to have what I desire. (B). Must the object of interest exist in order to possess value? There must be an actual object of interest, but it may be belief, assumption or fancy merely. (C). Is interest the fact of value, or the cognition of value? It is evidently the former, though it may be attended by introspective consciousness, or cognition of it by the same subject.

2. Mr. Moore would reject outright the view that value consists in relation to a subject. (A). Goodness cannot signify the judgment of goodness, for then the judgment would have no object. (B). Goodness cannot signify merely the interest of the judge, for then there could be no discussion of goodness, no common meaning. (C). Goodness cannot be the same as relation to interest, because the predicate may be otherwise used. But verbal usage or conscious meaning are not decisive. We must look to their objects. (D). Goodness cannot consist in a relation at all, because if it did nothing could be intrinsically good. But that which *contains* the relation to interest may be intrinsically good. Relation may be predicated either externally or internally.

3. A considerable group of writers would define value in terms of 'higher' or duly qualified interest fulfilments. (A). First, there are those who would confine values to some specific complex type of interest, such as self-conscious interest, or 'self' interest, or the characteristic 'human' interest, or the collective social interest, or a consistent, co-operative interest, or the universal will. But to confine value to the fulfilment of any one of these interests would be arbitrary, if it were not for the fact that they are inclusive, conserving, facilitating or otherwise *quantitatively* superior to a momentary or individual inpulse. (B). Second, there is the view which would confine values to the fulfilment of interests having 'pre-

suppositions'—when these presuppostions are *true*. These presuppositions concern, (1) the state of the object or its relation to other objects, (2) the existence and purport of other interests. When such presuppositions are true the value which they condition is founded on truth, but this is different from its being truly a value. It is truly a value when the interest fulfilment exists. When it is founded on truth it is a greater value in that it is more durable, or more completely satisfying. Thus we appeal again to a quantitative standard.

**Discussion: The Standpoint and Method of Psychology:—**

J. E. CREIGHTON.

The main contention of this paper is that the type of psychology which is based upon the categories of physical science does not satisfy all the demands that may legitimately be made for an understanding of the mental life. It may even be questioned whether the general or abstract laws of mentality are not physiological, rather than psychological in character. Even if we grant that for certain purposes a physiological psychology or a psychological physiology is necessary, it must be maintained that the mental life has also to be made comprehensible as an individualized form of experience. This type of psychology has a different ideal of intelligibility from that of the 'natural science' conception of uniformity. It seeks to discover the concrete 'idea' of mind by analyzing its activities and comprehending its purposes and systems of value. Analysis, from this point of view, does not seek for existential elements, but traces the development of the function of the self, in its concrete relations to the world and to society. It makes use of introspection and of experiment; but its important instrument of analysis is history. This conception of psychology is not merely an unrealized ideal, but has been present, more or less consciously, in many of the great systems, and is yielding important results at the present time in the numerous studies that are appearing on social psychology, the psychology of religion, myth, custom, and language, etc.

The paper is published in complete form in this number of the REVIEW (March, 1914).

F. M. URBAN.

The realm of philosophy is the entire field of experience. Psychology, which cultivates part of this field, is just as much in need of the support of philosophy as any other science. Some of its notions and methods are in particular need of epistemological analysis, because they show problems, which arise in other sciences also, under an

unfamiliar aspect. The notions of introspection, probability, and of the psychometric functions may serve as examples. In trying to correlate mental states with definite objective conditions one encounters the difficulty that there exists no such groups of conditions which always produces the same mental content. If you let your subject compare two stimuli, his judgment will vary in successive experiments in such a way that you can not foresee which judgment will be given in a particular experiment. Judgments of this kind, as a matter of fact, have all the formal and material features of random events and comply with the requirements of the calculus of probabilities. Does it follow from this that the mental contents expressed in these judgments do not depend necessarily on their conditions? Since there are many events about the causal connection of which there is not the slightest doubt and which, nevertheless, may be successfully made the object of treatment by the rules of the calculus of probabilities, we are not forced to deny causal connections between mental states and their conditions. A problem of similar great generality is found in the notion of the psychometric functions, which give the probabilities of the different judgments in terms of the comparison stimulus. The fundamental problem consists in determining the course of an unknown function, several values of which are given from observation. In actual practice one does not use the most general type of function but a very special class, called analytic functions. These functions are valuable on account of the following two properties: (1) They can be determined on the basis of a finite number of observations, and (2) once determined, their course may be followed up as far back or ahead as one pleases. What are the reasons for restricting the scope of the investigation in this way? The same problem is found in every case where one tries to apply mathematical reasoning to the study of the phenomena of nature, and it seems that the so-called principle of causality is identical with the assumption that there are no other but analytic functions in nature. The way to advance this problem consists in dropping this assumption as a whole or in part, and observe the consequences.

JOHN DEWEY. (No summary furnished.)

HUGO MÜNSTERBERG.

Professor Münsterberg started with an account of the recent, much discussed declaration of protest of one hundred and six philosophers in Germany. They demanded that the faculties and governments create special professorships for experimental psychology, instead of

filling the chairs for philosophy with psychologists. They insisted that psychology is a special science which is nowadays detached from philosophy. The pamphlets of Wundt, Marbe, Hillebrand, take the opposite stand. Psychology and philosophy belong together, or, in more extreme form, philosophy is to be made dependent upon psychology. We have here in America the same contrasting views. The fundamental condition for bringing order into this chaos is the recognition that there exists not one psychological standpoint, but two, and that the two kinds of resulting psychology stand in very different relation to philosophy. The causal psychology must remain the psychology of our laboratories, but no causal psychology of logical or ethical processes can be a substitute for philosophy. Moreover, no psychophysical research can contribute to the solution of the fundamental problems like the right or wrong of introspection, of psychical causality, of parallelism, of the subconscious. Every special fact of observation can be interpreted in either of the opposing theories. They must be settled beforehand by epistemology. The other standpoint of the psychologist is that from which mental life appears as the expression of a meaning. The resulting psychology is purposive. While the background of the causal psychology is a naïve dualism, the background of the purposive psychology must be a naïve realism. Every element of human experience can be treated from both standpoints. The biological behaviorism also allows both forms. The bodily action may be looked on as the substratum of the causal mental process or as the bodily expression of a purposive self. Only the purposive psychology speaks of that mental life of the individuals for which norms exist. It is therefore the only psychology which is directly related to philosophy. Yet the standpoint of the philosopher cannot be identified with that of the purposive psychologist either. He ought not to be interested in those mental acts by which the individual submits to the norms, and that is to the values, as this submission involves the acknowledgement of a realm of absolute values, the subjects of which are not individuals but an over-individual will. While causal psychology leads to no philosophy, teleological psychology leads to relativistic philosophy only. The analysis of the idealistic philosopher, who deduces the validity of the absolute values from the postulate of reality, precedes both and guarantees their definite rights in the system of our over-individual tasks.

**Bergson, Berkeley, and Philosophical Intuition.** A. C. ARMSTRONG.

In Bergson's philosophy the doctrine of intuition is central, but difficult. Therefore he illustrates it by examples: the writer and his

plot, the artist and his picture. Philosophical intuition, again, may be shown actually at work by means of examples historically attested.

This opportunity has been taken by Bergson in his paper before the Fourth International Congress of Philosophy, printed in the *Revue de Métaphysique et de Morale* (1911, pp. 809–827). No philosophy, it is there argued, has ever said more than one thing. And this intuition is independent of time and circumstance, of earlier systems and contemporary ideas. So Berkeley defended idealism, nominalism, the reality of spirit volitionally conceived, and theism. But these fundamental theses form only the 'body' for his central thought. This can be approached only through mediating images—matter visually imaged as a film intervening between God and man, or, by audition, as a divine language, intelligible unless, with the metaphysicians, we hypostatize the sounds themselves.

Bergson's historical interpretation is attractive and illuminating. It leads to the heart of Berkeleyanism, which so many miss. But does it stand the test of comparison with the historical data, from the *Commonplace Book* to *Siris*? So compared, Bergson's conclusions seem of a hazardous sort.

For example, Berkeley did say one thing—supremely. Theistic immaterialism formed his objective throughout his life. But was this the sole aim of his thinking? The *Commonplace Book*, on the contrary, shows him from the start minded to reform the sciences as well as to defend faith. Mathematics and natural philosophy, like metaphysics, must be freed from the abstractions of the schools. His nominalism, therefore, is not a mere vehicle for his idealism. His view is possible, and technically defensible, but it is the reverse of historically probable. And so with the other fundamental theses. There is indeed a movement, a direction, an 'intuition' informing Berkeley's system—but this is not a transcendent, detachable principle, independent, in the absolute sense, of contemporary conditions and using contemporary ideas merely as media of expression.

Similar conclusions hold of Bergson's discussion of philosophy and the sciences. A philosopher re-fashions and transforms the ideas of his time, philosophy re-thinks scientific results in the light of its own concepts. The work in either case is more than mere combination—but it is also other than the simple manifestation of self-subsistent philosophemes.

**Some Aspects of the New Realism.** I. W. RILEY.

Negatively, the new-realism is a reaction against the old idealisms with their emphasis on the abstract, the a priori. Its first task

(Marvin) is to get rid of the everlasting epistemology from Kant to Royce. Positively, the new-realism is a return to the richness of reality, the direct awareness of the external world. Here its task is to arrange and interpret the concrete data offered by science, law, politics, religion. The old idealism had two blind alleys—solipsism and agnosticism. The escape from the former is by a return to primordial common sense. The escape from agnosticism, and especially the ego-centric predicament (Perry) is effected by the emancipation of epistemology and a recourse to the discoveries and inventions of the modern age. Further analysis shows that the subject is in no way the creator of the object (Spaulding). Yet objects analyzed disclose a network of relationships between objects and the subject perceiving them (Montague). This relational theory avoids the crudities of naïve realism and escapes the difficulties of subjective idealism. It runs into a metaphysical theory of hylopsychism, which means that the potentiality of the physical is the actuality of the psychical, and the potentiality of the psychical is the actuality of the physical. The latter term of this definition is apparently in contradiction to Pitkin's strictures against German vitalism and French creative evolution as both containing the old, discredited categories of idealistic psychology. Yet while Pitkin disparages the revival of the Aristotelian entelechy he himself defends radical realism as Aristotelian. Against this historical inconsistency we put the service of the new realistic biology in breaking down the barrier between the noumenal and phenomenal.

From this reduction of the old dualism there arises a sense of relief. There is also a sense of greater freedom as against such a view as that of Münsterberg which states that we are free in the noumenal but bound in the sphere of the phenomenal. A final advantage of neo-realism is the possibility of making modern philosophy less anthropomorphic, since introspection is not counted fundamental, nor inward meditation as rich as outward reality. Against these advantages are to be set certain difficulties. It is easy to demolish the high idealism in so far as its world is a projection of the pure intellect and its accompanying illusions (Holt). Cognition may not be creative, but has it not a prime function, if the world of matter is to be rendered cognizable? The new realists need to tell us more about the recent discoveries concerning the constitution of matter. They acknowledge the 'big situation.' It remains for them to show us that this mighty maze is not without a plan.

**The Non-Existence of Existence.** CHRISTINE LADD-FRANKLIN.

The term existence stands for an incomplete, and therefore an erroneous, conception. There is no such thing as existence, in the abstract,—the term has no meaning,—it needs to be *précisé*,—existence where? Since it is impossible to change the meaning of a current word, there is nothing to do in this case but to adopt another expression—instead of saying that 'something exists,' we should say that it occurs *in* a specified domain of conscious experience. There is nothing,—that is, no nameable concept,—that does not occur in some *domain* (to use the mathematician's word). The main task of philosophy is to classify and strictly to delimit these different 'domains,'—its errors in the past have been largely due to its neglect of (or wrong performance of) this preliminary work. Domains cannot, in general, be defined (in the mathematician's sense of the word)—they are too fundamental for that; they belong to the 'primitives' of philosophical thought,—namely, to the class of 'explicit indefinables.' But they can be *fixed* by the logical 'method of pointing,' which is what takes the place of defining in such cases.

Complete classifications of domains have not yet been made. But the main division of them is into (1) the domain of objects of thought which have (in addition to a pastness coefficient, which attaches to all objects of thought) also a place coefficient, which attaches only to some objects of thought; and (2) those which do not. The terms Space and Time which are usually used in this connection, are far too abstract. They are in their usual sense pure myths, built up out of the not-farther-analyzable conscious-experience coefficients, pastness and place.

The terms *real*, *reality*, etc., are affected with the same obscurity as is the term existence. Everything is real (that is, occurrent) within its own field. The 'real object' of any realist is simply, in the last analysis, that object-of-thought which has attached to it the place co-efficient, (and not the pastness co-efficient only). To attribute anything more than this to it is to indulge in Inference, based upon unjustifiable suppressed premises. One may safely be a Hypothetical Realist, but nothing more. The objectification of the Real Object (like that of 'space' and 'time') is due to insufficient analysis. Philosophy (however the converse relation may hold) has constant need of the support of an acute and profound psychology.

**Mechanism and Teleology.** J. H. HYSLOP.

The historical origin of the antithesis lies in the opposition between animism and philosophic views. Here the opposition was between the

fixed law of nature and supposed caprice in it. The antithesis was between law and lawlessness, not between the kinds of causes. The Greek mind did not regard inertia as an essential property of matter, assuming that some forms of it were inert and others capable of self-activity. Christianity came and set up the absolute inertia of matter and so found the creative or self-active agent outside of matter. This established a dualism, dividing the world into matter and mind, with 'mechanical' laws ruling one and spiritual laws the other. The antithesis in this sytem was between *vis a tergo* forces to account for motion in matter and *vis in re* forces to account for the phenomena of intelligence. The ancient antithesis was between the regularity and the irregularity of events, regardless of the question whether the cause was external or internal. The Christian antithesis was between external and internal causes. In this system teleology was consistent with 'mechanism,' though it did not supplant it.

In the Christian system 'mechanism' was convertible with the idea of external causation, and was not made convertible with uniformity, though that characteristic might be present and at times was conceded as the essential feature of the 'mechanical.' The whole matter was further complicated by the reversion of modern science to the ancient doctrine of matter, assuming that it might be self-active in some of its phenomena, a view which removed the antithesis between it and the teleological, though the physicist still argued on the assumption that the antithesis was there. He abandoned the Christian conception of matter while he clung to the antithesis based upon that conception.

Further complication came in the confusion of the evidential with the explanatory problem. Ancient thought, whether Greek or Christian, appealed to caprice and lawlessness as the evidence of freedom and teleology, and so drifted into the assumption that regularity was the essence of the 'mechanical,' with some exceptions. This antithesis became coincident with that between 'mechanism' and teleology, and whether this antithesis was lost by changing the doctrine of inertia it still lingered in the evidential problem, creating confusion worse confounded. On the doctrine of inertia a machine or 'mechanical' system implies *vis a tergo* causality, and while it excludes teleology from the action of the machine it does not exclude it from the cause. It will be only a matter of evidence to show that the cause is 'mechanical' or teleological. Neither can be assumed *a priori*. Further, as uniformity and law may define the rational as well as the physical, we cannot appeal to it to prove the mechanical alone. The question is open to find the teleological, and as the teleological is proved to be

consistent with the 'mechanical' in human machines, it may still be so in cosmic affairs. The consistency of the ideas, however, is no evidence of the facts. For the fact of teleology, which has usually been applied to cosmic problems, we must go first to mental phenomena where we find teleology to be indisputable, whatever theory we adopt regarding mental phenomena. Materialism does not exclude teleology here. Then for objective teleology we have again the consistency of the ideas and the facts in proof of teleology in the existence of purpose associated with human creations. Teleology is at least parallel with 'mechanical' phenomena. The conservation of energy cannot displace it here any more than in purely mental phenomena. For objective teleology the evidence is not so clear. Organic life seems to indicate it, but biology opposes it strenuously, and even if admitted the disappearance of all that makes this teleology interesting leaves the teleology without much meaning. Consequently the fundamental condition of proving teleology in the cosmos at large is the proof that consciousness may exist independently of the organism. That once done it will appear indubitable that teleological phenomena are at least parallel with the 'mechanical' in the universe, and it would remain to prove that it is prior and the instigating cause of the 'mechanical' itself.

## LIST OF MEMBERS.

Adler, Professor Felix, Columbia University, New York.
Aikins, Professor H. A., Western Reserve Univ., Cleveland, O.
Albee, Professor Ernest, Cornell University, Ithaca, N. Y.
Alexander, Dr. H. B., University of Nebraska, Lincoln, Neb.
Ames, Professor E. S., University of Chicago, Chicago, Ill.
Angier, Dr. R. P., Yale University, New Haven, Conn.
Armstrong, Professor A. C., Wesleyan Univ., Middletown, Conn.
Bakewell, Professor Charles M., Yale Univ., New Haven, Conn.
Baldwin, Professor J. Mark, Care N. W. Harris & Co., New York.
Balz, Professor Albert, University of Virginia, Charlottesville, Va.
Bawden, Professor H. Heath, Box 691, San Diego, California.
van Becelaere, Rev. E. L., Convent of the Visitation, Georgetown, Ky.
Bigelow, Rev. Dr. F. H., 1625 Mass. Ave., Washington, D. C.
Bode, Professor B. H., University of Illinois, Urbana, Ill.
Boodin, Professor J. E., Carleton College, Northfield, Minn.
Brandt, Professor Francis B., Central High School, Philadelphia, Pa.
Brett, Professor G. S., Toronto University, Toronto, Canada.
Britan, Professor Halbert Hains, Bates College, Lewiston, Me.
Brown, Dr. H. C., Columbia University, New York.

Brown, Professor Wm. Adams, Union Theol. Seminary, New York.
Bryan, President W. L., Indiana University, Bloomington, Ind.
Buchner, Professor E. F., Johns Hopkins Univ., Baltimore, Md.
Bush, Dr. Wendell T., Columbia University, New York.
Butler, President N. M., Columbia University, New York.
Caldwell, Professor W., McGill University, Montreal, Canada.
Calkins, Professor Mary Whiton, 22 Bellevue St., Newton, Mass.
Campbell, Professor Gabriel, Dartmouth College, Hanover, N. H.
Carus, Dr. Paul, La Salle, Ill.
Case, Professor Mary S., Wellesley College, Wellesley, Mass.
Cattell, Professor J. McKeen, Columbia University, New York.
Chandler, Dr. Albert R., Harvard University, Cambridge, Mass.
Chrysostom, Brother, Manhattan College, New York.
Coe, Professor George A., 606 W. 122d St., New York.
Cohen, Dr. M. R., College of the City of New York, New York.
Cox, Professor George Clarke, Dartmouth College, Hanover, N. H.
Creighton, Professor J. E., Cornell University, Ithaca, N. Y.
Cross, Professor George, Rochester Theol. Sem., Rochester, N. Y.
Cunningham, Professor G. W., Middlebury College, Middlebury, Vt.
Curtis, Professor M. M., Western Reserve Univ., Cleveland, O.
Cushman, Professor H. E., Tufts College, Boston, Mass.
Cutler, Professor Anna A., Smith College, Northampton, Mass.
Daniels, Professor Arthur H., University of Illinois, Urbana, Ill.
Dashiell, Professor J. F., Waynesburg University, Waynesburg, Pa.
Davies, Dr. Henry, Easton, Md.
Dearborn, Professor G. V. N., Tufts Medical School, Boston, Mass.
Dewey, Professor John, Columbia University, New York.
Dewing, Mrs. A. S., 469 Broadway, Cambridge, Mass.
Doan, Professor F. C., Meadville Theol. School, Meadville, Pa.
Dodge, Professor Raymond, Wesleyan Univ., Middletown, Conn.
Dolson, Dr. Grace N., Smith College, Northampton, Mass.
Drake, Professor. Durant, Wesleyan Univ., Middletown, Conn.
Duncan, Professor George M., Yale University, New Haven, Conn.
Elkus, Miss Savilla A., Vassar College, Poughkeepsie, N. Y.
Eno, Mr. Henry Lane, Princeton, N. J.
Everett, Professor Walter G., Brown Univ., Providence, R. I.
Ewer, Professor Bernard C., Reed College, Portland, Ore,
Fite, Professor Warner, University of Indiana, Bloomington, Ind.
Fogel, Professor Philip H., Princeton University, Princeton, N. J.
Franklin, Mrs. Christine Ladd, 527 Cathedral Parkway, New York.
French, Professor F. C., Colgate Univ., Hamilton, N. Y.

Fuller, Mr. B. A. G., Harvard University, Cambridge, Mass.
Fullerton, Professor G. S., Herschell Street, Munich, Ger.
Furry, Dr. W. D., Johns Hopkins Univ., Baltimore, Md.
Gardiner, Professor H. N., Smith College, Northampton, Mass.
Gifford, Professor A. R., University of Vermont, Burlington, Vt.
Gillett, Professor A. L., Hartford Theol. Sem., Hartford, Conn.
Gordon, Dr. Kate, 5744 Kimbark Ave., Chicago, Ill.
Gore, Professor Willard Clark, Univ. of Chicago, Chicago, Ill.
Griffin, Professor E. H., Johns Hopkins Univ., Baltimore, Md.
Gulliver, President Julia H., Rockford College, Rockford, Ill.
Guthrie, Dr. E. F., University of Pennsylvania, Phila., Pa.
Hall, Professor T. C., Union Theological Seminary, New York.
Hammond, Professor W. A., Cornell University, Ithaca, N. Y.
Henderson, Professor Ernest N., Adelphi College, Brooklyn, N. Y.
Hibben, President J. G., Princeton University, Princeton, N. J.
Hill, President A. Ross, University of Missouri, Columbia, Mo.
Hitchcock, Dr. Clara M., Lake Erie College, Painsville, O.
Hite, Professor L. F., New Church Theol. Sch., Cambridge, Mass.
Hocking, Professor W. E., Yale University, New Haven, Conn.
Hoffman, Professor Frank S., Union College, Schenectady, N. Y.
Hollands, Professor E. H., University of Kansas, Lawrence, Kan.
Horne, Professor H. H., New York University, New York.
Howes, Mrs. Ethel Puffer, 167 W. 113th St., New York.
Hughes, Professor Percy, Lehigh Univ., South Bethlehem, Pa.
Hume, Professor J. G., University of Toronto, Toronto, Canada.
Husik, Dr. Isaac, University of Pennsylvania, Philadelphia, Pa.
Hyde, President William DeWitt, Bowdoin College, Brunswick, Me.
Hyslop, Dr. J. H., 519 W. 149th St., New York.
Johnson, Professor R. B. C., Princeton University, Princeton, N. J.
Jones, Professor A. L., Columbia University, New York.
Jones, Professor Rufus M., Haverford College, Haverford, Pa.
Jordan, Professor E., Butler College, Indianapolis, Ind.
Kallen, Dr. Horace, Univ. of Wisconsin, Madison, Wis.
Keyser, Professor Cassius Jackson, Columbia Univ., New York.
Ladd, Professor G. T., New Haven, Conn.
de Laguna, Dr. Grace A., Bryn Mawr College, Bryn Mawr, Pa.
de Laguna, Professor Theodore, Bryn Mawr College, Bryn Mawr, Pa
Lane, Professor W. B., University of Toronto, Toronto, Canada.
Lefevre, Professor Albert, Univ. of Virginia, Charlottesville, Va.
Leighton, Professor J. A., Ohio State University, Columbus, O.
Lloyd, Professor A. H., Univ. of Michigan, Ann Arbor, Mich.

Longwell, Professor Horace Craig, Northwestern Univ., Evanston, Ill.
Lord, Professor Herbert G., Columbia University, New York.
Lough, Professor J. E., Sch. of Pedagogy, N. Y. Univ., New York.
Lovejoy, Professor A. O., Johns Hopkins Univ., Baltimore, Md.
Lyman, Professor Eugene W., Bangor Theol. Sem., Bangor, Me.
McAllister, Professor C. N., State Normal School, Warrensburg, Mo.
McClure, Dr. M. T., Columbia University, New York City.
McCormack, Mr. Thomas J., La Salle, Ill.
McGilvary, Professor E. B., University of Wisconsin, Madison, Wis.
MacCracken, Chancellor Henry M., New York Univ., New York.
MacDougall, Professor R. M., New York University, New York.
Macintosh, Professor Douglas C., Yale University, New Haven, Conn.
MacKenzie, President William Douglass, Hartford, Conn.
MacVannel, Professor J. A., Columbia University, New York.
Marshall, Dr. Henry Rutgers, 3 West 29th St., New York.
Martin, Professor Herbert, N. Y. Training Sch. for Teachers, N. Y.
Marvin, Professor W. T., Rutgers College, New Brunswick, N. J.
Mason, Dr. M. Phillips, 1070 Beacon Street, Brookline, Mass.
Mead, Professor George H., University of Chicago, Chicago, Ill.
Mecklin, Professor John M., University of Pittsburgh, Pittsburgh, Pa.
Meiklejohn, President Alex., Amherst, Mass.
Miller, Professor Dickinson S., Columbia University, New York.
Montague, Professor W. P., Columbia University, New York.
Montgomery, Dr. G. R., 1 E. 24th St., New York.
Moore, Professor Addison W., University of Chicago, Chicago, Ill.
Moore, Professor E. C., Harvard University, Cambridge, Mass.
Moore, Professor Edward L., Harvard Univ., Cambridge, Mass.
Moore, Dr. Jared S., Western Reserve University, Cleveland, O.
Moore, Professor Vida F., Elmira College, Elmira, N. Y.
Mott-Smith, Dr. M. C., Colby College, Waterville, Maine.
Münsterberg, Professor Hugo, Harvard Univ., Cambridge, Mass.
Newbold, Professor W. R., Univ. of Pennsylvania, Philadelphia, Pa.
Newlin, Professor W. J., Amherst College, Amherst, Mass.
Ormond, President Alexander T., Grove City College, Grove City, Pa.
Overstreet, Professor H. A., College of the City of N. Y., New York.
Pace, Professor E. A., Catholic Univ. of America, Washington, D. C.
Patrick, Professor G. T. W., University of Iowa, Iowa City, Ia.
Patton, Dr. Francis L., Theological Seminary, Princeton, N. J.
Patton, Professor George S., Princeton University, Princeton, N. J.
Payne, Professor Bruce R., University of Virginia, Charlottesville, Va.
Perrier, Dr. Joseph, 153 Chauncey St., Brooklyn, N. Y.

Perry, Professor Ralph Barton, Harvard Univ., Cambridge, Mass.
Pitkin, Mr. Walter B., Columbia University, New York.
Powell, Professor Elmer E., Miami University, Oxford, O.
Pratt, Professor J. B., Williams College, Williamstown, Mass.
Rand, Dr. Benj., Harvard University, Cambridge, Mass.
Raub, Professor Wm. L., Knox College, Galesburg, Ill.
Raymond, President B. P., Wesleyan Univ., Middletown, Conn.
Raymond, Professor G. L., George Washington Univ., Wash., D. C.
Read, Professor M. S., Colgate University, Hamilton, N. Y.
Riley, Professor I. Woodbridge, Vassar College, Poughkeepsie, N. Y.
Robbins, Mr. Reginald C., Lone Tree Farm, Hamilton, Mass.
Rogers, Professor A. K., University of Missouri, Columbia, Mo.
Rowland, Dr. Eleanor H., Mount Holyoke College, So. Hadley, Mass.
Royce, Professor Josiah, Harvard University, Cambridge, Mass.
Russell, Professor John E., Williams College, Williamstown, Mass.
Sabine, Professor George H., Stanford University, California.
Salter, Mr. William Mackintire, 107 Irving Street, Cambridge, Mass.
Schmidt, Professor Karl, 10a Bellevue Ave., Cambridge, Mass.
Schurman, President J. G., Cornell University, Ithaca, N. Y.
Sewall, Rev. Dr. Frank, 1618 Riggs Place, Washington, D. C.
Shanahan, Professor E. T., Cath. Univ. of America, Washington, D. C.
Sharp, Professor Frank C., University of Wisconsin, Madison, Wis.
Shaw, Professor C. G., New York University, New York
Sheldon, Professor W. H., Dartmouth College, Hanover, N. H.
Singer, Professor Edgar A., Jr., Univ. of Pennsylvania, Philadelphia, Pa.
Smith, Professor Norman Kemp, Princeton University, Princeton, N. J.
Sneath, Professor E. Hershey, Yale University, New Haven, Conn.
Spaulding, Professor E. G., Princeton University, Princeton, N. J.
Squires, Professor W. H., Hamilton College, Clinton, N. Y.
Starbuck, Professor E. D., American Unitarian Society, Boston, Mass.
Steele, Rev. E. S., 1522 Q St., Washington, D. C.
Sterrett, Professor J. M., Pierce Mill Road, Washington, D. C.
Stewardson, President L. C., Hobart College, Geneva, N. Y.
Stroh, Mr. Alfred M., Karlborgsragen, 32, Stockholm.
Strong, Professor C. A., Columbia University, New York.
Swenson, Mr. David F., Univ. of Minnesota, Minneapolis, Minn.
Talbot, Professor Ellen B., Mt. Holyoke Coll., So. Hadley, Mass.
Tawney, Professor Guy A., University of Cincinnati, Cincinnati, O.
Taylor, Professor A. E., St. Andrews, Scotland.
Taylor, Professor W. J., Training School for Teachers, Brooklyn, N. Y.
Thilly, Professor Frank, Cornell University, Ithaca, N. Y.

Thompson, Miss Anna Boynton, Thayer Academy, Braintree, Mass.
Thorndike, Professor E. L., Columbia University, New York.
Toll, Professor C. H., Amherst College, Amherst, Mass.
Tower, Dr. Carl Vernon, So. Hingham, Mass.
Tufts, Professor James H., University of Chicago, Chicago, Ill.
Turner, Professor Jno. Pickett, College of the City of New York, N. Y.
Urban, Professor Wilbur M., Trinity College, Hartford, Conn.
Warbeke, Professor John M., Williams College, Williamstown, Mass.
Washburn, Professor Margaret F., Vassar Coll., Poughkeepsie, N. Y.
Weigle, Professor Luther A., Carleton College, Northfield, Minn.
Wenley, Professor R. M., Univ. of Michigan, Ann Arbor, Mich.
Weyer, Professor Edward M., Wash. and Jeff. College, Washington, Pa.
Whitney, Professor G. W. T., Princeton University, Princeton, N. J.
Wilde, Professor N., University of Minnesota, Minneapolis, Minn.
Wilm, Professor E. C., Wells College, Aurora, N. Y.
Wilson, Professor G. A., Syracuse University, Syracuse, N. Y.
Woodbridge, Professor F. J. E., Columbia University, New York.
Woods, Professor James H., Harvard University, Cambridge, Mass.
Wright, Professor H. W., Lake Forest College, Lake Forest, Ill.
Wright, Dr. Wm. K., Cornell University, Ithaca, N. Y.

(Members are requested to notify the Secretary of any correction to be made in the above list.)

### Associate Members.

McMurtrie, Mr. Douglas C., 298 Metropolitan Tower, New York City.
Warren, Mr. Wm. R., 26 Beaver St., N. Y. City.

# REVIEWS OF BOOKS

*The Science of Human Behaviour, Biological and Psychological Foundations.* By MAURICE PARMELEE. New York, The Macmillan Co., 1913.—pp. xvii + 443.

The avowed purpose of this book is to bring together 'the results of recent work in biology in general and in zoology and neurology in particular, and in anthropology, and to show the significance of this work for the analysis of human behavior.'

The early chapters, the first half of the book, in fact, deal with purely biological matters, the nature of living matter, the cell, the theories of heredity and evolution as they have been formulated by Lamarck, Darwin, Mendel, De Vries, and Galton. Next a series of chapters is devoted to the behavior of unicellular organisms as discussed by Verworn, Loeb, and Jennings. The various tropisms are described and an account is given of the more important theories of the activities of these low forms. The author expresses little sympathy for the conclusion of Jennings that even in these lowest organisms one may find many of the characteristics of the behavior of higher organisms.

Three chapters are devoted to a description of the nervous system and its development. The work of Sherrington, Herrick, and Johnston is summarized with some completeness. Numerous long quotations insure an accurate statement of the views of these men. It might be questioned whether the various views are sufficiently fully introduced and knit together and freed from technical terms to make them comprehensible to the uninitiated for whom alone the book has value, —a question that can only be answered through trial. If it prove available in these respects it will be very convenient to have the material in one volume.

What is perhaps the characteristic personal contribution of the author in the volume as a whole first makes its appearance in the chapters on instinct. This is a questioning of the conclusions of much of the current discussion of instinct. After collating most of the more modern definitions of instinct he eliminates one by one many activities that are somewhat loosely brought together under the term. He has the usual difficulty in distinguishing between reflex on the one hand and the results of intelligent action as crystallized in habit on the other. What he objects to most is the usual custom of using the term

instinct to designate the ends that are accomplished, as in the parental instinct or sympathy, and lumping a large number of indefinite acts together under the one head. After weighing the advantages and disadvantages of the several theories he himself concludes: "An instinct is an inherited combination of reflexes which have been integrated by the central nervous system so as to cause an external activity of the organism which usually characterizes a whole species and is usually adaptive." Testing by this criterion the author must greatly reduce the list of human instincts as given by current writers. He does not supply a list of his own, and if taken sufficiently seriously the definition given would probably practically eliminate instincts from the list of factors of behaviorism. Reflex on the one side and intelligent action on the other might easily expand to fill the gap. Fear, sympathy, emulation, workmanship, gregariousness are among the instincts that Parmelee would reject or would anlayze into a group of instincts or reflexes. This portion of the book is always suggestive and interesting although not always consistent.

Probably the least satisfactory chapters of the book are the three devoted to the psychological problems entitled respectively, "The Nature of Intelligence," "Consciousness" and "Personality, Intelligence, Consciousness and the Nature of Kind." Part of the difficulty is due to too great condensation but more to the fact that the author does not seem fully to have mastered and kept separate the different attitudes and ways of approach that now rule in psychological circles. He frequently brings together in a single discussion statements that are true only if one recognizes that they have been developed from different presuppositions which are in themselves incompatible. The two opposing ways of approach, the objective and the subjective, are those that most often give rise to unclearness. He does not consistently stick to one or the other nor make clear that the two methods are each tenable but cannot be harmonized at present; nor make clear that certain of his conclusions are true if the one set of premises holds, others if the other set is posited. The consequence is an almost all pervasive confusion. This mixing of standpoints comes out clearly in his discussion of the criteria of intelligence. Jennings's functional, but objective, criterion of modifiability of behavior is rejected because it would carry intelligence too low in the animal series. Loeb's associative memory,—strictly taken, a subjective criterion,—obtains more favor, but is made to rest upon the purely structural test of the presence of association centers, and again the ants are said to have association centers, probably from purely functional considerations.

Then the whole matter is further complicated by making intelligence depend upon the presence of ideas. Intelligence implies learning, and then the author says: "I shall limit learning to modifications in the behavior of an animal capable of forming images when such modifications are due to the ability to form images." This last criterion of learning is in principle inapplicable below man, and in the form stated would not truly describe most human learning, which is apparently very little dependent on the presence of ideas. Professor Parmelee admits that it may never be possible to apply his criteria of intelligence to any animal in practice. Similar objection might be made to his insistence in one place that emotion is merely the subjective side of instinct and in another to the assertion that it is nothing but sensation, and then in one of the last chapters making emotion an active force in producing social organization, alongside of and in addition to instinct. The entire discussion in this part of the book, it seems to the reviewer, is a curious mixture of over subtlety and great dogmatism in drawing distinctions of his own coupled with complete failure to appreciate distinctions which have long been found of great value to the psychologist.

In the last four chapters are discussed the forces that make for social evolution. A long summary based on Wheeler and Wasmann is given of the social phenomena as they appear among the ants with casual references to the other social insects. The conclusion is reached that insect societies depend mainly upon instincts. More briefly are discussed the facts of association among the vertebrates, from the fishes to man. The forces that contribute to the formation of societies are classed under three groups, external or environmental, such as the restricted areas of food suitable to a species, the distribution of temperature, etc., and two internal forces, primarily instinct and intelligence. Each is of value only in so far as it shows utility for survival. The whole attitude may be shown in this summary, p. 393. "Man is very social, because he is weak as compared with many species which prey upon him, because his young are born very helpless and remain so for a long time, and because he has a highly developed nervous system which furnishes the basis for a high degree of intelligence, thus making possible a high degree of mental interaction from which result a good deal of pleasure and a great deal of cooperation and mutual aid in the form of a social division of labor which facilitates greatly the securing of food and the other necessities of life."

Of the instincts, the sexual and parental alone receive emphasis. These are not available in the development of the wider associations,

since the author admits with Espinas that the family is in many ways inimical to the formation of wider association. The only advantage is that it develops certain talents that may make easier the development of wider associations. The emotions are said in one place (p. 406) to be forces that increase the effect of the instincts, sexual and parental, and so contribute to the formation of the family. Later (p. 418), in criticism of Sutherland the emotions are identified with instinct, in harmony with the earlier definition. Among intelligent forces are mentioned invitation, the recognition of kind, communication, made possible by the development of vocal organs and the nervous system, and leadership. The theories that have laid emphasis upon these different forces are briefly reviewed with the conclusion that "all of the writers—McDougall, Petrucci, Adam Smith, Sutherland, Giddings, Kropotkin, Tarde, and Durkheim—have made important contributions to the analysis of social evolution, but it is evident that all of their theories are too unilateral and do not include all of the factors in social evolution."

On the whole the volume provides a useful résumé of a wide range of the literature in English, in general biology, nervous anatomy and physiology, and psychology, that bears upon human behavior. It is of course impossible for any one to be equally familiar with all parts of so wide a field, there must be occasional slips and there would necessarily be difference of opinion as to the emphasis that should be put upon different parts of the field; but in spite of its faults the work should be a convenient work of reference for the student who has not the time or opportunity to read the summaries of fact in the different realms of knowledge from which Professor Parmelee draws his material.

W. B. Pillsbury.

University of Michigan.

*Prinzipien der Erkenntnislehre. Versuch zu einer Neubegründung des Nominalismus.* Von E. v. Aster. Leipzig, Quelle & Meyer, 1913. —pp. 408. Geh. M. 7.80; Geb. M. 8.60.

The subtitle proclaims this work to be an attempt to ground anew the doctrine of nominalism. The proposal bids us pause, for who is unmindful of the three centuries of 'monkish quarrel' when wrangling schoolmen drew out in fine-spun distinctions every theological impliction of this doctrine, made logic confront itself, asked of psychology impossible questions, framed definitions in general terms where the meaning of general terms was itself the matter in dispute, and drove the whole controversy afield into boundless regions of metaphysical speculation? It is true nevertheless that nominalism

triumphed, the authority of the Church was broken, and the vast system of Scholasticism came to an end.

Recently a new nominalism under Monsieur LeRoy has impugned the validity of our science. This has occurred because, as Bertrand Russell has clearly shown, general relations are a special class of universals—neither genera nor abstractions, but a third type the schoolmen overlooked. Now modern science is a system of relations, in the form of general laws and principles. When these are expressed in the language of science, a nominalist may say we get a succession of empty symbols, and science may seem on the point of vanishing. We may indeed respect the nominalist doctrine under this guise as one would respect a test-tube of prolific germs which, if the fragile glass be shattered, might plunge the world again into mental doldrums.

However, the bare conclusion that general terms are empty sounds —*vocis flatus*—and nothing more, is a self-refuting doctrine. One must go on and explain how we come to employ such fictions as if they meant something. And Professor von Aster holds that we can discern the relations of things, and that this knowledge is communicable. General concepts do not exist, but a mental content of a different kind exists and supplies the lack of them. Ordinarily, he believes, language spoken, heard or read, does not stimulate to mental pictures or other representations corresponding to separate general terms. Words awaken, for one thing, "reflexes in consciousness," feelings, which, as it were, supply a running commentary to the thought-process, but feelings do not constitute meaning or sense. It is a definite psychological problem to discover what actually functions in place of general concepts, and this task, being intricate, requires a thorough inductive investigation of the meanings of words.

To define a word by other words does not liberate us from the spell of conceptualism; it leads us either to infinite regression or to an obvious circle. The only procedure open to us is to refer terms back to their ultimate points of reference among the data of sense impressions. The term 'Matterhorn' thus leads to a certain crude fact of experience. We need not seek the actual sense-impression, a memory image will suffice. Such an image is a "natural symbol"; it does not misrepresent, and yet it is not exactly like, the original impression. The author concludes that the difference between memory image and percept is *sui generis*. But this reference of the word to a memory image is safe and satisfactory. It constitutes the second method of determining the meaning of a word.

Most words, however, in fact all except singular terms such as

Matterhorn, do not acquire their full meaning out of what is barely given in sense-impression. The term 'blue,' for example, evinces a reaching out toward more content than is contained in the one particular color that I see or imagine. Or, again, if I hear a rumbling sound and designate it as the roar of an approaching train, the term used indicates a crude fact in complication with an inference about it. These instances will give some hint of a third way in which meaning can be apprehended. They also will furnish a clue to the manner in which genera and abstractions are conceived, for these concepts are not gained immediately through sense, which can reveal only the individual and the concrete.

It is clear that we do not recall classes and abstractions, since we have never apprehended them through sensuous appearances. It is a knowledge not of them but about them that we possess. This sounds mysterious, but does not science deal with real objects which also outstrip sensuous appearances, transcending the data gained from our senses, just as do the ideal objects that we call genera and abstractions? A tree as real object has volume, has a side we do not see; we say its leaves have definite color, however much their appearance alters under varying conditions of distance and illumination. The real object and the species are both indeed generalizations; the real exists at a definite time, the ideal is thought of as timeless: this is the principal difference.

The mind bridges the chasm between sense-given facts and real objects by its propensity to form judgments. We lean on past memories when we infer that a real tree has a side turned away from us. What we mean by saying that the tree is an *actual* object is that the tree will fulfil certain expectations of ours; that is that these will be realized if we see to it that certain conditions are fulfilled. Likewise in the case of ideal objects, their meaning is expressed in judgments such as apply to any or all real objects of the given class.

The author adjusts this explanation very convincingly to a wide range of notions, to those of colors, sounds, the ego, et cætera. Following Ehrenfels on the matter, he asserts that the mind has an immediate perception also of relations in the form of phenomenal appearances; secondarily, that from these the real relations are to be inferred; and thirdly, that we can reasonably discuss ideal relations, such as those of identity, similarity, unity, manifoldness. The world of science receives on these grounds an ample justification, and thus his nominalism leads to realistic conclusions.

Applying these considerations to the nature of language, it must be

evident that words have almost no clear meaning when apperceived totally apart from all context. Language was made to denote relations, to express judgments, especially those that take the form of expectations. Suppose, while walking in a wood, I turn carelessly to inspect a dark streak by the side of the path, and my companion says, 'that is a viper.' It comes as the signal for a definite immediate reaction, a feeling of fear, of aversion, and an involuntary recoil. I am thrown into a state of automatically assumed expectancy. Likewise, when one says, 'this is chalk,' the meaning consists in a series of expectations more or less explicit, which are reducible to the general form. Given certain conditions *A*, then *B* will follow. In a scientific concept a great many such judgments may be implied, they obviously need not all be present in consciousness when we use the term.

The theory of Professor von Aster bears in many interesting respects upon the theory of knowledge, the nature of truth, the foundations of science. Viewing science as a closed deductive structure, the highest last principles on which the entire system hangs are upon his inspection found to be definitions of the objects of which science treats. They need, therefore, no special proof. The three primary laws of thought are likewise definitions, conveying what is really meant by the terms 'true' and 'false.' There are also a priori synthetic judgments, some of which become the foundations of mathematics. Such judgments as $2 + 2 = 4$ are universally valid, from the fact that they can always be verified by visual imagery without going back to sense-data. This test shows whether the statement holds for any and all cases of remembered or imagined objects of the kind concerned; moreover, we assure ourselves in this way that we are unable to conceive any case in which the statement could be contradicted. Such a priori truths are not all mathematical; for example, orange is more similar to red and to yellow than it is to green. Such judgments are not empirical, but the relations thus discovered conform to what we are accustomed to define as real. The test of truth here adopted is a modification of the 'correspondence theory,' but the reader will probably feel that judgments, as thus explained, seem self-evident rather in the sense that they are evident to the self than that they carry their evidence in themselves.

The 'objective reality of relations,' which to the reviewer still seems to figure in the theory rather as an assertion than as a verified statement, leads to a rather narrow conception of the limits of pure mathematics. Let us consider von Aster's theory of the logical origin of geometry. He regards geometrical points and lines as species of limits

or boundaries that can be actually visualized. A circle in geometrical space is consequently "anschaulich vorstellbar," that is, we can construct it in visual imagination "in so far as it is to be sought among such figures as we are able no longer to differentiate perceptually" (p. 233). Besides, we are provided with certain a priori synthetic truths concerning geometrical space and figures. A limited number of these are necessary to geometry in that it would not be a possible science without them. These are the axioms.

Objection can be raised when it is discovered what are the axioms thus provided. One is, there can be but one straight between two points. This is controverted by the Riemannian geometry. Another is, there is motion without deformation. This is contrary to the geometry of Lobachevski. These two geometries are secondary growths on the ground that their problems can be visualized only by translating them into Euclidean space. The contention is correct but as non-Euclidean geometries they certainly belong to geometry, even though they do not fit into the narrow frame thus provided for geometry as one of the sciences.

The same narrowness of foundation is observed when psychology is discussed. We have found human knowledge to be of a very definite character, being based on our habit of anticipating future possible experiences. This ideal accords very well with the aim of physical science, but psychology is hopelessly far from being at present an exact science like physics. Moreover, it is hazardous to prophesy what its destiny may be. It seems that for psychology and her kindred to perfect themselves they must seek laws of action and systematize human nature. To the reviewer this proposal appears to involve a violent perversion of what is already known about personality as an object of science. Especially hazardous is the advice since it is suggested that in order to frame laws of the mental life we should make free use of the concept 'sub-consciousness,' of which almost any random assertion may pass muster if it seems to aid progress.

Considering the abstruseness of the problems, their treatment by Professor von Aster is remarkably clear and effective. The reviewer nevertheless bespeaks some indulgence, if he has misinterpreted the author's meaning in any essential point, since the nature of the problem makes its discussion complex and difficult, and it is scarcely possible to give an adequate account of so intricate an argument within so narrow a compass.

Edward M. Weyer.

Washington and Jefferson College.

*Psychology applied to Legal Evidence and Other Constructions of the Law.* By G. F. ARNOLD. Calcutta: Thacker, Spink, & Co. 2d ed., 1913.—pp. xi, 607.

This work might more descriptively be named (after the fashion of seventeenth century broadsides): "An Arraignment of Law at the Bar of Science; wherein may be discovered that, as Ignorance of the Law is no Valid Plea for the Layman, so Ignorance of Science is no Tenable Plea for the Law; and wherein is set forth by Examples the Extent of Law's Contrariety to Science."

The first edition appeared in 1906; but few copies reached this country. The present edition has been considerably enlarged, as well as thoroughly revised. The author is described as "late member of the Burma Legislative Council, and formerly offg. Deputy Secretary to the Government of India Legislative Department"; and, if we remember correctly, the first edition noted also that he had held judicial office in Burma.

The chapters bear the following titles: General Introduction; Some Specific Defects of the Law; Intention; Attention; The Normal Man; Causation; Belief, Doubt, Tests of Truth, Reality; Feeling, Imagination, Prejudice, Habit; Insanity; Hallucinations, Illusions, Hypnotism, Sleep; Identity, Similarity, Comparison of Handwriting, Imitation; Responsibility, Punishment, Justice; Differences of Race; and two Appendices. The thesis of the book is that the law must advance with science; and the method is, taking psychology as a typical modern science, to outline its teachings on specific topics, and then by these to test the validity and aptness of the law's rules affecting such topics. It happens that the topics selected fall mostly in the fields of Evidence and of Criminal Law, but their range is much broader than those alone.

The first chapter sounds a note which has been already heard in this country, notably from Professor Roscoe Pound among lawyers, from Professor Hugo Münsterberg among psychologists, and from Professor Overstreet among philosophers. It is thus expressed: "If there is one path which lawyers and judges fear to tread, it is that of philosophy. . . . But there are signs that a new situation will have to be met even in the conservative realm of law." Mr. Arnold's exposition of this thesis is temperate but severe. We wish that every lawyer could read it. 'Tis well that a lawyer himself is found preaching on this text. The minds of one hundred thousand men in this country have to be opened to the new truth. You cannot open men's minds with a hatchet. Nothing is left but to persuade them to listen; and they listen best to one of their own kind.

In the second chapter, the author formulates six specific charges against the law; (1) its artificiality of language obstructs its being understood by the layman; (2) it is unduly narrow in its methods of procedure; (3) it neglects other sciences, and relies on its own inadequate data; (4) it gives excessive regard to outworn precedents; (5) its rules of evidence are not based on the facts of experience; (6) these shortcomings produce failure of justice. All these six, we think, fall in line as corollaries or examples of the third. That expresses the root of the trouble; for, as Mr. Arnold puts it, "The world of our law courts is not something independent, as the lawyers strive to make it, but is a mere element in our total experience." If at this moment we could trepan the legal mind so as to make it appreciate this truth, the rest of the desired improvements would naturally follow.

In the ensuing chapters, Mr. Arnold takes up specific legal rules and terms, testing them by science. His method can be sufficiently seen in Chap. III, on Intention. Beginning with the terms "will," "intention," "motive," he describes them from the point of view of the modern psychologist and philosopher, quoting from Bradley, Höffding, Wundt, Stout, Sully, and other accepted authors. He then takes up certain legal principles, such as "every person must be taken to intend the natural consequences of his act," "a person may be estopped to deny the truth of his assertion, even if he has made the false representtion without fraud or negligence"; and proceeds to criticize these choice and orthodox bits of scholastic logomachy. Copious examples are given, from Indian and English decisions, of the verbal pedantry and unpractical nonsense to which such unscientific terminology leads the law. And this method of exposition he continues throughout the other chapters.

Lawyers have been brought up from their first days on this inadequate lingo, and cannot be expected to realize how unnatural and pedantic so much of it is. A defective terminology is one of the greatest defects of the law. Yet so inveterate is the lawyer's complacence with it that the two or three simple scientific terms which the writer dared to devise for a 3,000-page treatise on Evidence were laughed at goodnaturedly as allowable follies, and are still a favorite theme of jest by legal friends. The explanation is that the law naturally gets its terms from below, *i. e.*, from daily usage, and not from above, *i. e.*, from the ether of scientific research; and that the law has many important problems to attend to which dwarf the claims of terminology. Nevertheless, in a period like the present, when the law is faced with the necessity of adapting settled principles to new

instances and to new truths of science, this lack of a terminology becomes a tremendous handicap, and is today a main source of its inability to cope speedily with the situation.

Mr. Arnold's book is mainly destructive, not constructive,—as indeed he frankly admits in his Preface. But, at today's stage, this method is inevitable. And his method is correct and valuable in that he begins by invoking and expounding the data of science and then measuring the law's concrete rules by those tests. What we need in this country today is more books of this kind. Every law-student should be given this book, and more like it, to open his eyes to the need of squaring the law with science.

Of course, there is going to be much misuse of such books, before we get through the stress and storm period. "Laymen think law is all clover," as one of our law-school songs has it. That is, laymen are apt to believe that all that is needed, to cause the laws' defects to crumble away, is a due quantity of harsh criticism. Even professors of psychology and of sociology and of political science have been known to exhibit this superficial notion. But they forget that the law is simply a set of attempts to solve vast and complicated facts of daily life. The maelstrom of facts will be there, even if this or that set of rules is withdrawn. Some other set of rules must be supplied, to keep the maelstrom in order. It may seem to the scientist easy enough to criticize the law's definitions of "intention," "motive," "negligence," "cause," and the like. But let the psychologists and the philosophers leave their study-chairs, mount the judicial bench, and try to lay down a set of rules, fair in result and strictly equal for all conditions of men, and capable of solving the millions of variant cases that have to be met from day to day; and perhaps they would find that the task they attacked was not so scientifically simple, after all; that rules of thumb were a godsend; that abstractions do not always work in the concrete; that in the welter of fraud and honesty, danger and safety, lies and truth, contracts and wrongs, statutes and ordinances, mortgages and writs of error, capitalists and usurers, drunks and derelicts,—certain everyday notions were usually the safest guide for the day's strenuous toil at keeping the world in order and decently safe and honest; and that the judge and the lawyer may be charitably excused for not letting go of the fairly safe old adages of Coke and Blackstone, until Modern Science has constructively devised in their stead some new ones which will work as well in the court-room as they do in the quiet laboratory.

In short, neither the philosopher alone, nor the law-man alone, can

meet the situation. Our course today is two-fold: to wake up the older lawyers, and to educate the young ones, to the claims of science; and then to let the New Era Lawyer work out the final solution for himself. Mr. Arnold's book ought to help greatly in this task.

JOHN H. WIGMORE.

NORTHWESTERN UNIVERSITY.

*Self-Realization. An Outline of Ethics.* By HENRY W. WRIGHT New York, Henry Holt and Company, 1913.—pp. xiv, 429.

This volume, by Professor Wright, amply justifies itself as a text-book on Ethics. Though not without merit as an attempt at independent construction, it is valuable chiefly for its adaptability to the needs of college students. It is comprehensive, well-arranged, fair for the most part in its criticisms, and generally clear and forceful in style. The argument is built upon the thesis that man's highest good is Self-realization, interpreted as the organization and development of all his capacities. This one principle correlates all our moral judgments, and establishes the supreme authority of moral obligation. As the *summum bonum*, Self-realization harmonizes Hedonism and Rationalism, Intuitionism and Empiricism, Egoism and Altruism, self-assertion and self-sacrifice; it provides for the permanence of moral distinctions, whatever the possible development of the moral life; and it furnishes the only principle for a satisfactory classification of the virtues.

Without any historical preliminaries, the treatise opens at once with an exposition of the nature and scope of Ethics. This has the spirit, if not altogether the manner, of Professor Seth in his *Ethical Principles*. Indeed, the reader is constantly reminded of Seth, to whom fitting acknowledgment is made in the preface. But we have not a mere rearrangement of Seth's material. The book gives evidence that Professor Wright is not only a close student of ethical literature, but a thinker of considerable insight, both critical and constructive. This discussion of the nature and scope of Ethics constitutes Part I, under the title, "Ethics as the Science of Good Conduct." Conduct includes "all of the activity by which man's personality gains expression." As against Herbert Spencer and Professor Dewey, the author contends that no conduct is ethically indifferent, since all ends and activities are expressions of a unitary personality. In this part of the book the usual definitions and explanations are given. The moral ideal is the problem of Ethics. The good that completely satisfies the will (= the self) can be none other than the will itself in its fullest realization. The moral ideal must be "an expression of what is latent

in the character of the agent and within the range of his possible attainment. . . . In order to awaken enthusiasm and inspire effort the ideal must be raised far above the actual and represent a height of attainment which appears impossible enough to all save the enraptured idealist" (p. 35).

In Part II, on "The Nature of the Good," are shown the claims of Hedonism and Rationalism as one-sided and opposing schemes. There is perhaps nothing in the book more admirably done than the discussion of volition as an organizing agency (Chapter IV). Volition is the self in action, exercising its intellectual and emotional resources in realizing its ideals of good. It is "the synthetic activity which includes within its scope all these lesser activities of feeling, thought and action" (p. 135). Volition is creative of self-conscious personality, is in fact the self in the process of self-realization. It must advance on its own initiative to grapple with an uncertain future. The threadbare question of freedom is judiciously handled. Extremes are avoided. Freedom in the sense of self-direction is allowed. The author rightly sets aside as absurd the device of those who in their zeal for freedom contend that the will may follow the weaker motive. "The explanation of freedom is self-determination, the explanation of self-determination is development—the realization of the latent and often unknown possibilities of human nature" (p. 167).

Full Self-realization, or the complete organization of human conduct, requires the realization of (1) the Individual Self, (2) the Social Self, (3) the Universal Self. The third and culminating phase concerns the adjustment of human interests to the All-encompassing Reality. This, though a question of religion rather than of Ethics, is an essential aspect of self-realization. It involves not so much specific activities in addition to those prescribed by individual and social duty as "a personal attitude—resignation to" (better, accord with) "the divine will, and trust in the divine wisdom."

That the principle of Self-realization furnishes an adequate criterion for the moral life is argued at length and, as it seems, convincingly in Part III, "The Good as Self-realization." After an introductory consideration of Hebraism and Hellenism and their synthesis in the Christian ideal, the author takes up the criticisms of Professor Sorley and Professor Boodin. In reply to Professor Sorley's assertion that Self-realization "is void of moral content and cannot express the nature of the moral ideal," he points out that "according to Self-realization, the Good lies in the realization of the *whole* self in distinction from any part or division of the self. From this ideal we secure a clear and decisive

standard of moral judgment. The line of distinction is drawn between actions which contribute to the satisfaction of all the capacities of the human self and those which serve to gratify only single ones. The former are judged good: the latter are pronounced bad" (p. 214). The application of a criterion so general to questions of specific right and wrong is often obscure and difficult. "This does not lessen the value of Self-realization as the Ideal, however; for, in order to fulfil this office, a conception must . . . be universally applicable throughout the entire field of conduct. Hence while in the regulation of daily life we may find that principles, more definite in meaning and limited in range, are usually of greater assistance, still on critical occasions when these principles themselves are called into question such an ideal is indispensable as a final court of appeal. The Ideal may be likened to the polar star which, far removed from the affairs of our planet, gives to the surveyor of the earth's surface his ultimate direction of reference" (p. 215).

Professor Boodin's criticism that Self-realization does not permit us to make distinctions of moral worth, as between the conduct of different individuals, is handled with equal decisiveness and with rather more attention than it deserves. The entire argument of the book is by implication an answer to both these critics. But the author unfolds freely his doctrine of Self-realization as the ultimate criterion of conduct in the two great fields of human value—individual and social interests. There emerge the maxims of Prudence and Idealism, of Altruism and Humanitarianism.

The difficult problem of self-sacrifice Professor Wright seeks to solve by conceiving of moral development as a progressive self-organization. He illustrates it by the evolution of an organism, in which parts developed independently are subordinated to the interest of the comprehensive unity. In the moral life, self-mastery causes real suffering, but seeks the individual's total interest; and on a larger scale, self-sacrifice entails real loss to the individual, but promotes the welfare of society. Professor Baillie's exposition of self-sacrifice in the *Hibbert Journal* for January is more illuminating. Further, Self-realization furnishes the strongest motives to right conduct. The egoistic, altruistic and religious motives, inadequate singly, are organically united in the motive of Self-realization, which expresses itself as self-respect, philanthropy and reverence. A life thus unified and harmonized brings happiness.

Part IV, on "The Life of Self-realization," hazards, with the courage that it praises, a classification of the virtues. Professor Wright's achievement here is a gauntlet to the apathetic and the skeptical.

In general, the author, while not over-anxious to be practical and edifying, speaks with such clearness and conviction that his book is a moral tonic. He recognizes what is sometimes forgotten by his fellows, that a prime requisite of a text-book on Ethics is evident system, a logical structure as nearly faultless as possible. Accordingly, he endeavors to make his work practical in the best sense.

Professor Wright regards Ethics as a science, yet he does not allow himself to be hampered by too strict an interpretation of the term. He does not hesitate on occasion to pass from the scientific to the philosophical point of view. While, in general, efforts to fuse the scientific and the philosophical are ill-advised, Ethics is so distinctively and fundamentally a philosophical discipline that a hard-and-fast scientific treatment limits unduly the range of discussion. Professor Wright treats Ethics as a science only in the sense that its material lends itself to systematic arrangement, with Self-realization as the organizing principle.

GEORGE A. WILSON.

SYRACUSE UNIVERSITY.

*Introduction to Philosophy.* By ORLIN OTTMAN FLETCHER. New York, The Macmillan Company, 1913.—pp. xvii, 420.

To write a book which will successfully meet the beginner in philosophy on his own level and safely conduct him into the difficult path of philosophical inquiry without benumbing his spirit and chilling his interest in the subject is a desperately difficult task. One who undertakes to write such a book is at once confronted by many perplexities. Where shall he begin and where leave off? What shall he discuss and what shall he exclude from consideration? With how great a show of finality shall he present his conclusions? Indeed, what conclusions shall he reach? For it must be assumed that the student for whom the book is primarily intended knows little or nothing about philosophical problems and methods, that too much or too little in the book will bewilder him and give him a false impression of what philosophy really is, and that too great a hesitancy on the part of the author to express his own views in the light of conflicting opinions will lead to scepticism concerning the possibility of the science of philosophy itself, just as surely as too great a degree of dogmatism in the presentation of the various problems will defeat its own end and leave the student untouched by the invigorating stimulus of the philosophic spirit. To write a first book in philosophy is a task not to be lightly undertaken.

The volume before us is a very serious and a very commendable

effort to accomplish this difficult task. It is the product of several years of classroom work, as every such volume should be, is written in a very terse and vigorous style, and can hardly fail to encourage the student to philosophize on his own account—a characteristic of the book which cannot be too highly praised, and which should commend it to the careful consideration of all teachers of philosophy who are interested in finding a suitable text for use with first year students.

The scope of the work can perhaps best be indicated by a summary of its contents. It is divided into four parts. Part I is introductory. Part II is historical, giving a very comprehensive, but very general summary of the views of the principal philosophers from the pre-Socratics through Spencer; the thought-tendencies of the present are indicated. Part III constitutes the body of the work, and is subdivided into two divisions. The first of these divisions is epistemological, discussing the nature of knowledge, the relation between knowledge and reality, and the nature of reality. The second division is devoted to a consideration of the categories, the categories treated being those of Permanence and Change; Individuality; Substantiality; Quality; Quantity; Space; Time; Activity, Rest, and Motion; Causality; Finality; Individuality and Personality; Sociality. Part IV deals with the problems of the freedom of the will and the existence of God.

In the preface the author frankly states that he has a philosophical doctrine, and that that fact "determines the treatment given the questions and opinions" discussed in his book (p. vi). His philosophical doctrine is that of objective idealism, and the conclusions and opinions which his volume sets forth are those which naturally follow from this peculiar point of view. This bias, however, does not lessen the value of the book as a text, since all questions considered are discussed with eminent fairness and opposing views are stated and criticized. Every book must be written from some point of view, but that fact does not necessarily make for dogmatism in discussion. Teachers who agree with the point of view of the present text will find it helpful; those who are forced to dissent from its point of view will find it stimulating.

While I personally agree with the point of view from which the book is written, and while I accept most of the conclusions which it reaches, there is one defect in it which, as it seems to me, will greatly impair its usefulness as a text-book. The historical part of the book will very probably not serve the purpose which the author intends; on the

contrary, I am inclined to think that it will defeat its own end. Instead of helping the student for whom the book is presumably written, this historical introduction will rather confuse him. In my opinion, it is simply impossible to give in one Part of an Introduction to Philosophy a summary of the whole history of philosophical speculation, even though one hundred and seven pages be devoted to that purpose, which will be of very much assistance to the average student in comprehending problems discussed in another Part. This arrangement presupposes powers of synthesis which the uninitiated student does not possess.

This criticism is not to be interpreted as implying that I object to an historical introduction to the independent discussion of philosophical problems. On the contrary, I should be inclined to insist, and in my own teaching I proceed upon the assumption, that the historical introduction is essential. What I am objecting to here is only the manner in which the historical introduction is treated in the present volume. I believe the treatment is unpedagogical; the historical summary will, I am convinced, prove practically useless so far as the student is concerned, despite its general accuracy. There is too much material included in it, in the first place; and the opinions of Plato, Aristotle, Kant, Hegel, and the rest are separated by too many pages from the particular problems where these opinions would be of assistance to the struggling undergraduate. I can well see the bewilderment of students as they wander through these one hundred and more pages, packed full of the thoughts of the great thinkers of the past, wondering what it all has to do with an introduction to the discussion of philosophical problems; and when at the end of the semester's labors they have finished the book, I dare say few, if any, would be able to tell on the basis of their own experience why the historical part of the book should have been written at all.

A better method, it seems to me, would have been to give a clear and concise account of the historical side of each problem as it comes up for consideration. Despite his extended historical introduction, the author finds this method necessary in his discussion of some of the categories, as, for example, that of Substantiality. Here (pp. 265 ff.) we find a summary of the views of both ancient and modern philosophers concerning Substance inserted as an introduction to the author's (and the student's) independent investigation of the problem; and here the historical part of the discussion seems vital and meaningful, as I have no doubt the student will find it to be. Had all the other categories, as well as the problem of knowledge and reality, been

treated in the same way, the book, in my estimation, would have been greatly improved as a text. It is to be hoped that, in the next edition, the author will merge Part II into Part III, using the historical background for the one specific purpose of orienting the student with reference to the problem in hand. It seems to me that the usefulness of the book as a text for beginners will be decidedly increased when this is done.

The arrangement of the book into sections and sub-sections is admirable, and will greatly help the student to keep his bearings. The book is in very good print, an index is supplied, and a list of references is given for each chapter. The author has referred in this list almost exclusively to works with whose general conclusions he is in agreement. It might be questioned whether reference should not also have been made to works of other philosophic faiths; had this been done, the value of the bibliography would most certainly not have been diminished. It is very easy, however, for those who use the book as a text to supplement the bibliography in any way they may see fit, or even to substitute another.

G. WATTS CUNNINGHAM.

MIDDLEBURY COLLEGE.

# NOTICES OF NEW BOOKS.

*Le Rapport Social*, Essai sur l'objet et la mèthode de la sociologie. Par E. DUPREEL. Paris, Alcan, 1912.—pp. iv, 304.

The aim of the volume is to propose a general concept which may be a useful instrument for the investigations of sociology. Such concepts have previously been sought in imitation (Tarde), constraint of the individual by collective society (Durkheim), and consciousness of kind (Giddings). The peculiar problem of sociology requires that psychological conditions and physical facts be interpreted in mutual relation. The concept of social *rapport* (named though not developed by Bouglé) is comprehensive enough to include the field, while it is not liable to the objection of being imported from some other situation. A social *rapport* exists between two individuals when the existence and mode of behavior of the one has an influence upon the psychological states and acts of the other. The various social sciences are considered as falling under special cases of rapport.

The most important section of the book is its treatment of the specific relations of equality and inequality. If A is indifferent to B, while B desires something which depends on B, we have inequality. Suppose now that A takes advantage of B's desire and chooses among the services which B offers, A admits that to this extent his satisfaction depends on B. A synthetic, social *rapport* which may be called equality thus tends to replace inequality. This conception of equality is much more significant than that which depends merely on resemblances in individuals. Social classes result from a combination of equality and inequality. The whole social mechanism is comprised under the process of class formation and dissolution. In aristocratic societies certain inequalities tend to accumulate and condense into transmissible advantages; in democracy the reverse is true. In actual life both tendencies are at work. Three causes make for equality, the mechanism of normal life (exchange, legislation, money as medium, communication, etc.), conscious efforts of inferiors to rise, conscious efforts to promote equality as an ideal. In general those factors favor equality which make the social point of view preponderant, that is, the dependence of each upon each and upon all. On the other hand, inventions, novelties, are fruitful in inequalities—temporary at least. A final chapter on social logic considers the social forces at work in the spread of ideas, particularly of "confused" ideas as contrasted with the "clear" ideas of definite science. Such confused ideas are most moral and religious conceptions. They prevail because of their practical rather than because of their logical value.

Some of the applications made of the general concept of *rapport* seem of very dubious instructiveness. On the other hand the *rapport* of equality

justifies itself as a fruitful conception. One might question the adequacy of deriving this from a dependence based on a desire of what another has. Race, color, 'clannishness' as causes of class do not fall naturally under this head.

J. H. TUFTS.

THE UNIVERSITY OF CHICAGO.

*Immanuel Kants Werke.* In Gemeinschaft mit HERMANN COHEN, ARTUR BUCHENAU, OTTO BUEK, ALBERT GÖRLAND, B. KELLERMANN, herausgegeben von ERNST CASSIRER. Band III. *Kritik der reinen Vernunft.* Herausgegeben von ALBERT GÖRLAND. Band IV. *Schriften von 1783–1788.* Herausgegeben von ARTUR BUCHENAU und ERNST CASSIRER. Berlin, Bruno Cassirer, 1913.—Band III, pp. 675; Band IV, pp. 558.

The continuing volume of Kantian literature must be a perplexing phenomenon to those who believe that the history of philosophy has had its day. Twenty years ago, when the classical traditions of philosophy were more universally accepted, at least in the English-speaking world, the serious student of Kant had to choose between two standard editions of the philosopher's complete works, both badly out of print, the Rosenkranz and Schubert edition of 1838–1842, in twelve volumes, and the revised Hartenstein edition of 1867–1868, in eight volumes. Both were printed in Roman type and each had its strong points: the Rosenkranz edition gave the text of the *Kritik der reinen Vernunft* in its original form [first edition], if that was to be considered an advantage, and also was printed in excellent type, while the revised Hartenstein edition was not only sufficiently legible, but decidedly convenient in the eight compact volumes, and had certain distinct advantages, like the chronological arrangement and greater textual accuracy, which commended it to most scholars. But, while the revolt against the traditions of philosophy was gathering some headway in the English-speaking world, there began to be published in 1902 the monumental Berlin edition of Kant's complete works, edited by the Prussian Academy of Sciences. In mentioning this monumental edition, indispensable, of course, for university libraries, it may seem finical to refer to the not very agreeable printed page. If patriotism had to dictate a return to the German type, a somewhat more generous page would have been an improvement.

The appearance of a new edition of Kant's works, with Dr. Ernst Cassirer as general editor, was noticed in the May, 1913, number of the PHILOSOPHICAL REVIEW, and the contents of Volumes I and II were there indicated. Those volumes contain the pre-critical writings, representing the period from 1747 to 1777. Volumes III and IV, which have recently appeared, confirm the favorable impression made by the initial volumes. Both the editors and the publisher are to be congratulated upon their success in bringing out this admirable edition. The printed page, in the clearest of Roman type, is on the whole more satisfactory than that of any previous edition,—only comparable, in fact, with that of the very legible Rosenkranz edition. Paper as well as type is all that could be expected in a worthy edition of a great philosophical

classic and the editors seem to have done their work well. The paging of the original editions is indicated as well as varying readings. Volume III, edited by Dr. Albert Görland, contains the *Kritik der reinen Vernunft*, following the text of the second edition (1787), with an appendix giving the variations from the text of the first edition (1781). Volume IV, edited by Dr. Artur Buchenau and Dr. Ernst Cassirer, contains the *Prolegomena zu einer jeden künftigen Metaphysic*, the *Grundlegung zur Metaphysik der Sitten*, and the *Metaphysische Anfangsgründe der Naturwissenschaft*, as well as the lesser writings published between 1783 and 1788. When it is considered that the set will be complete in ten volumes, with two additional "Erläuterungsbände," and at the very moderate price of seven marks a volume (unbound), it will be evident that students of philosophy cannot fail to appreciate this new and most excellent edition.

ERNEST ALBEE.

CORNELL UNIVERSITY.

*Spinozas Philosophische Terminologie.* Von GUSTAV THEODOR RICHTER. Leipzig, Verlag von Johann Ambrosius Barth, 1913.—pp. 170.

This work is based upon the assumption that a determination of the meaning of Spinoza's terms in their historical setting is an indispensable preliminary to the understanding of his philosophy. Because of the lack of such linguistic investigation, commentators have disagreed and Spinoza has been misrepresented. It is true that Spinoza himself is to a certain extent accountable for this vague and erroneous interpretation, in that he gives new meanings to traditional terms, modifies the meaning of his own terms in the course of his literary activity, adapts his language to his varying audiences, and softens it to prevent offense. Nevertheless much confusion could have been avoided if the method of this volume had been earlier pursued. The terms here treated are those of the ontology: *attributum, attributa infinita, in se, per se, a se, esse, concipi, substantia, modus, modificatio, accidens, affectio, modi infiniti, res fixæ et æternæ.* The author carefully distinguishes the senses in which these words have been used from the time of Aristotle on, with particular reference to their signification in the period of Scholasticism. The investigation is minute, and yet sane, controversial, and yet constructive. At times the discussion seems unjustifiably subtle; *e. g.*, regarding the synthetic or analytic relation of attribute to Substance and the bearing upon this problem of the three verbs, *exprimere, explicare, constituere*, or again, the differentiation of the logical and ontological relations of attribute to Substance. All this seems more suited to such an involved material as Scholasticism, of which the author is a profound student, than to the broader and more practical propositions of Spinoza. Yet the author anticipates just such criticism in the final paragraph of Chapter I where he admits that his results are often not conclusive because of Spinoza's own unresolvable ambiguity, that many of the problems he has considered doubtless never occurred to Spinoza, and reminds us that Spinoza's purpose was primarily ethical, and not logical. (Again the analysis of *in se, per se,* and *a se*, is pushed to a bewildering minuteness, yet the term *per se concipi*

is asserted to be used quite generally, without any *nuance*. Apparently, detail is not offered gratuitously.) Again, if the parallelism of *simul*, *postia*, and *statim* in a passage in Geulincx with the same words in a passage on the same subject in Spinoza seems an absurdly slight argument for a connection between the two, one must recall the prefatory remark that the case has been already established by substantial arguments and that these points are but small additions. Taken as a whole, this interesting argument for the influence of Geulincx upon Spinoza is convincing. The criticism is natural that if the author is conscious of his own occasional over-subtlety and has at his command enough really significant arguments, he might have spared himself and the reader some of the detail. But the answer would seem to be that only by such painstaking elaborateness is he able to settle long-standing disputes and to make solid an accurate interpretation. The frequency of controversial digression is defensible on similar grounds. The interpretation of attribute as the realization of the formal essence of Substance in some concrete material could scarcely be established without reference to various disputed questions. —Similarly, it is evident that no one definite conception of Substance, of the relation of mode to Substance, of the 'fixed and eternal things' mentioned in the *Treatise on the Improvement of the Understanding*, could be maintained without disposing of various dissenting opinions. Many of the views given are unconventional, and even in a measure original, but it would be difficult to refute a position which rests upon an exceptionally thorough knowledge of Spinoza, his historical back-ground, and the important commentaries, and which adduces as proofs seven hundred and sixty four exact references for one hundred and twenty one pages of matter. The book is a highly special, but in its field, an eminently valuable, piece of research.

KATHERINE EVERETT GILBERT.

*L'Année philosophique, 1911.* Publiée sous la direction de F. PILLON. Paris, Librairie Felix Alcan. 1912.—pp. 290.

The twenty-second annual volume of *L'Année philosophique* has a longer table of contents than usual; but the more interesting articles are still those of the veteran contributors, MM. Pillon and Dauriac. Most of the others are, by comparison, rather slight, with the exception of one by M. Delbos. Where critical discussions occur, the monadistic idealism of the editor is the usual norm; but otherwise the subjects are too varied to permit a single characterization of the volume. A brief résumé of the articles is therefore substituted.

1. G. Rodier; "Note sur la politique d'Antisthene." This is a brief but interesting correction of Zeller on a point of interpretation. It is argued that the myth in Plato's Politicus concerning human society under the reign of Chronos in the Age of Gold, and the passage in the Republic (372A) describing the "state of nature," are not intended as indirect criticisms of Antisthenes, as Zeller supposed, but represent Plato's personal conviction. The passage in the Politicus should be taken as an allegory of the perfect state which is de-

scribed in the Republic; and the allegorical form is chosen precisely because, when the Politicus was written, Plato had concluded that the ideal of the Republic was unattainable "under the reign of Zeus."

2. G. Lechalas; "Les années d'apprentisage d'Eugène Fromentin." This article deals with the origins of the famous painter's well-known novel, *Dominique*, and seems rather out of place in its present setting.

3. V. Delbos; "L'idéalisme et le réalisme dans la philosophie de Descartes." This is an excellent example of objective interpretation, within the short space of fifteen pages. The analysis is clear and apt, and the citations are useful. Descartes's *cogito ergo sum* did not reduce all being to thought; it simply asserted the immediate certainty that there was a being which thought. The part of idealism in the Cogito is "the priority of the affirmation of thought to any object in itself," and the statement that our existence in itself is entirely constituted by thought. The part of realism is that Descartes believes it necessary to posit our existence in itself. That *esse est percipi* Descartes never considered for an instant; otherwise why did he make the passage from idea to existence one of his chief problems? The "productive imagination" of Fichte he uses hypothetically in the Third Meditation, but only as a temporary means by which his methodological scepticism may dispose of naïve realism. In brief, if Descartes is to be called an idealist, it is only in the sense in which Plato usually is. He tends to define ideas as existences, as intelligible essences, rather than existence as idea. The Cogito is the first truth in order of discovery; but the first truth in itself is the existence of God, and innate ideas are true precisely because we have no share in producing them.

4. L. Dauriac; "Quelques réflexions sur la philosophie de M. Henri Bergson." A witty *causerie* which is worth reading for its instructive as well as its amusing qualities. After a playfully emphatic statement of why and how Bergsonism appears to all 'scientists,' mathematicians, 'rationalists,' and Kantians as the adversary of all sound philosophy—with some interesting comments as a spectator of the combat—M. Dauriac goes on to suggest that Bergson may not, after all, differ so absolutely from Kant as some of his critics have supposed. Is not Bergson's opposition of space plus determinism plus understanding to time plus freedom (evolution) plus intuition almost an exact parallel to Kant's opposition of phenomenal determinism plus understanding to noumenal freedom plus reason?

5. F. Pillon; "La troisième antinomie de Kant, la croyance à la liberté, le dilemme de Lequier et le primat de la raison pratique." This article, which runs to fifty-nine pages, is the longest and weightiest in the volume, and deserves a longer summary than can here be given. M. Pillon, now surely the *doyen* of French philosophers, is still intellectually adroit and vigorous. The fundamental error of Kant, it is held, is to be found in his making time, as well as space, subjective. Wishing to save moral freedom, he forgot that it must by its very nature be temporal, for it has reference only to future acts. If time be merely phenomenal, then purpose, personality, and duty are equally so. Kant is really as much determinist as Spinoza and Leibniz. Descartes is the

true opponent of determinism among the moderns, for freedom is the essential condition of the methodical doubt which is the presupposition of his whole system. It is true that like Renouvier he falls into the error of supposing that the will can create an infinitesimal amount of physical force. M. Pillon argues that the logical development of 'monadistic idealism' avoids such difficulties. Such an idealism holds that while space—and therefore mechanical causation—is subjective, time is real; and it does not fall into Leibniz's error of treating the physical order as though, matter apart, it were equally real with the psychical. Its proof of freedom is drawn from an examination of the categories, which shows, for example, that every series is finite, and therefore has an uncaused cause. Leibniz and Lequier are corrected from this point of view, and the article concludes with a sturdy rationalistic credo, which affirms that there is but one reason, and that is sufficient.

6. Ch. Maillard; "A propos de quelques ouvrages recents sur la philosophie allemande postérieure à Kant." "An attempt to refute the reasoning of the *Wissenschaftslehre* and of Hegel's *Logik* in its essential principles"—in fourteen pages! M. Maillard should have taken more space; but his criticism deserves attention. He holds that Fichte, in revising Kant, committed three capital errors. First, he substituted a single principle, the Transcendental Ego, for the plurality found in Kant. This is an "abandonment of the very principles of criticism," which is "an exposition of the totality of principles which make the sciences possible, the reality of which is deduced from the very existence of scientific knowledge, considered as an irreducible fact." Second, he confused logical correlation, as of subject and object, a true principle of synthesis, with contradiction, and reached the absurd conclusion that consciousness consists in a union of contradictories. This led him to confuse the deduction of the categories with a solution of the cosmological antinomies, and has made it impossible to determine whether it is the finite or the absolute ego which he regards as real. Third, he transforms ego and non-ego from logical correlates into real and opposing forces, thus opening the way for the subsequent rise of materialism from absolute idealism. Hegel exaggerates the defects of Fichte; "a confused syncretism from every point of view, the Hegelian philosophy floats at the will of the interpreter from Heraclitus to Parmenides, from Berkeley to Spinoza."

7. H. Bois; "L'Idéalisme personnel d'Oxford: M. Hastings Rashdall." A study of Rashdall's metaphysics, based on all his published writings. One of his ethics and theodicy is to follow.

8. L. Dauriac; "Une philosophie de la religion." A brief tribute to the memory of the Genevan philosopher, J. J. Gourd, in the form of an appreciation of his posthumously published work bearing the title of this article. Gourd's doctrine of 'incoördinables' has points of similarity to Pascal, to pragmatism, and to Kant; but it is, nevertheless, in its essentials, quite original.

Reviews of eighty works published in France during 1911 terminate this interesting volume.

EDMUND H. HOLLANDS.

UNIVERSITY OF KANSAS.

*Die wissenschaftliche Idee.* By HELMUTH PLESSNER. Beiträge zur Philosophie, No. 3. Heidelberg, Carl Winter, 1913—pp. 152.

In the preface the author sets forth the main purpose of the book as an attempt to understand what is meant by the phenomena which we call "the sciences." In this connection he is immediately brought face to face with the assumed necessity for the unification of knowledge. The impulse to unity seems to be a necessary law of our intellect. This peremptory need of reason for unity comes to light clearest of all in the sciences; it explains, in a way, their reason for existence, and therefore it must be our aim to dig down to the root of this universal and eternal impulse.

There follows then a brief discussion of the meaning of the concept 'science,' wherein there is found to lie the idea of order. Science is, in fact, ordered knowledge directed toward the universal. It has no interest in the particular as such, but only in the particular in relation to its surroundings. The search for the universal in the particular is the real business of science. If we now turn our attention to the specific sciences themselves, we find that not all of them are interested in the discovery of laws. History, for example, is concerned with tracing the steps in the development of the world, unless it be that we take Lamprecht's standpoint. And here follows an interesting account of Lamprecht's aim to make history a pure science. We are led, however, to acknowledge a clear distinction between the natural and the cultural sciences, such as history, art, etc. The former take the viewpoint of law, the latter that of value, and we cannot include the one within the other, for either might then turn round and claim the other. We must agree to recognize them both as on the same level.

The author then discusses the relation of the particular to the universal, and the process by which we arrive at the universal he calls inner abstraction or ideation, borrowing this last term from Husserl. This process of ideation leads us to the general or "ideat." The 'ideat' is conceived as a logical structure, *i. e.*, a ladder up to the last 'ideat'. The 'ideat' and its variously developed steps is the reality of the thought found in science. The ultimate 'ideat' is the logical end of all the sciences, only from it can order pervade the whole. There can, however, be no ultimate 'ideat,' for each 'ideat' necessarily demands a higher 'ideat,' and we thus arrive at the metaphysical paradox that there is an ultimate 'ideat,' but that it never can and never will exist.

Up to this point the author is more or less scientific in his mode of treatment, but from now on to the end of the book, unfortunately or fortunately according to the taste of the reader, he becomes decidedly metaphysical. The scientific investigator himself cannot know the relation of the particular result to the total result. We must presuppose a Something which supplies this relation to the whole. This Something is what works in the subconscious and creates the 'ideat.' The ultimate whole of which everything is merely a part, and therewith the ultimate Aufgabe of science, is God.

The place of chance, error and evil in such a system is then referred to. They all come under the concept of the possible, *i. e.*, the possibility of being

replaced by other things. They are not ideas contradicting the all-embracing order, but they arise from it. They exist because of our defective insight into the absolute uniformity of the whole. The problem of the ego is also taken up, and the pure subjective 'I' that never can become a 'me,' is found to be a part of the living spontaneously active God. And finally the author sums up in a sentence full of the haze of metaphysics; "science is the incarnation of the process formed by the meekness of man, which has sprung from the ὡς ἐρώμενον of God as logos." And further, the "latente Einstellung" of the scientist discloses itself as the love for God.

It is interesting to the psychologist to find the experimental results of Külpe, Watt, Ach, Messer and others of that school made use of in this metaphysical treatise, although it is doubtful whether the psychologist would agree to the wider interpretation given to them here. The "determinierende Tendenz" of Ach, the "Aufgabe" of Watt, and the "latente Einstellung" of Koffka are used as equivalent to the unconscious 'ideat' which guides the scientist in all his work, which makes him refer his particulars to the all-embracing Whole, called by our author, God.

RUDOLF PINTNER.

OHIO STATE UNIVERSITY.

*Versuch einer neuen Logik* oder *Theorie des Denkens.* Nebst angehängten Briefen des Philaletes an Aenesidemus. Von SALOMON MAIMON. Besorgt von B. C. ENGEL. Berlin, Reuther & Reichard, 1912.—Pp. XXXVIII, 445.

The *Kantgesellschaft* founded by Professor Vaihinger has proved a very vigorous organization. Among its recent projects is that of providing a series of new impressions of philosophical works that have become rare. In particular, the highly important period immediately following Kant's own publications is to receive systematic attention. Already reprints have been issued of Schulze's *Aenesidemus*, Liebmann's *Kant und die Epigonen*, and Maimon's *Versuch einer neuen Logik*. Two more volumes, by Tetens and Scholz, were in the press when the Maimon volume was issued.

In estimating the assistance which this brings to students of philosophy one must appreciate the light which is thrown upon the Kantian movement and its problems by the minor discussion of that period. For instance, the analyses of the Kantian doctrine of things-in-themselves, as given by Reinhold, and the criticisms of the same by Schulze and Maimon, not only proved determining for subsequent development, but also greatly aid us in understanding and judging Kantianism.

Maimon, in particular, was a critic of exceptional power and insight. The present volume contains the systematic presentation of his own views, in their culminating form, in his *Versuch einer neuen Logik*. These views, however, are developed with constant reference to the teachings of Kant. Even more interest, perhaps, attaches to the *Briefe des Philaletes an Aenesidemus*, which occupy 125 pages of the volume. These furnish brief and well-ordered criticisms of important positions. The first letter relates Maimon to Schulze; the second tests the basis of Reinhold's doctrine, to which also the fourth and fifth

are given; the third reckons with Hume, the sixth and seventh with Kant. These letters give within a brief compass a most instructive insight into the critical arguments and the resulting conclusions of Maimon. It is clear that the volume as a whole was well worthy of being reprinted.

E. L. HINMAN.

UNIVERSITY OF NEBRASKA.

*Schelling.* Par ÉMILE BRÉHIER. Paris, Alcan, 1912.—pp. 314.

This volume is one of the *Grande Philosophes* series, under the general editorship of Professor Piat. The series has been of high quality throughout; and Professor Bréhier's earlier contribution to it, the volume on *Chrysippus*, was crowned by the *Académie des sciences morales et politiques*. The present work is a systematic and thoroughgoing analysis of the entire body of Schelling's philosophical writings. Such a task is of surpassing difficulty, by reason of the manifold changes of viewpoint and the want of fundamental system in Schelling's writings. M. Bréhier, however, takes up each publication in chronological succession and analyzes it in detail, not only with much patience, but also with great clearness and insight. He discusses the external and internal influences that were operating in relation to each important doctrine, and shows the connection of each discussion with the larger development of Schelling. The result is that even French skill in exposition hardly suffices to give dominant unity to a book which follows so closely the ins and outs of Schellingian speculation; and yet, the reader is always able to appreciate the wood as well as the trees, to a far greater degree than in the writings of Schelling himself. It is true, of course, that an adequate understanding of the German philosopher could not be obtained at second hand, by reading this critical exposition; but if the more important works of Schelling were to be read in connection with this book, Professor Bréhier will have added enormously to the comprehensibility and significance of the entire study.

While the detailed analyses give an abiding value to the book, more interest for our present purpose turns upon the author's estimate of Schelling's work as a whole. The rapid transformations of Schelling's thought, and the demonstrable fact that these transformations were governed by the external surroundings of his life, give rise to the problem whether his development really expressed any inward and self-consistent law or motive; "for in spite of the assertion of Schelling, everything changes at bottom, the problems as well as the solutions." It is true that such writers as Kuno Fischer, Hartmann, and Metzger, have held that the want of continuity is only apparent, and have found, each in his own way, a point of reference from which the different stages can be seen as having a harmonious basis. M. Bréhier also finds a similar point of reference, but of a different type, since it emphasizes an affiliation with the line of thought which culminates in Bergson. *Things are of such a nature that the rhythm of their development can be taken up by the rhythm of our intuition.* With this as the key thought, all Schelling's variation may be explained. It is true that with Schelling everything took a speculative turn rather than a practical one, so that even intuition must be judged after the

analogy of Plotinus. Action is always in the service of an idea; but intuition is beyond the idea. Even when, in later life, Schelling emphasized the will and developed the doctrines which Hartmann magnifies as irrationalism, it was not the will-to-live, as with Schopenhauer, but the will-to-consciousness, to-have-ideas. Will with Schelling, then, was simply the power of the understanding itself. And yet, the author holds that Schelling was not an idealist: not temperamentally, for he believed not at all in the efficacy of the idea as such, of spiritual forces apart from nature; and not as a method, for while German idealism is a synthesis of conflicting opposites, Schelling denies the existence of the conflict itself. "In truth the great interest of Schelling, the fundamental value of his system, is not to cause spiritual forces to predominate in reality, as with idealism, but to cause to penetrate through everything in nature and history an intuition, which, far from remaining a stranger to things, as a spectator is to the objects he contemplates, follows rather the inward rhythm of their life, moves with them, penetrates them to the bottom." For the performance of the tasks which this program entailed, however, Schelling lacked the taste for psychology and the acquaintance with it which have fostered the work of M. Bergson.

E. L. HINMAN.

UNIVERSITY OF NEBRASKA.

*La Mennais, L'homme et l'écrivain.* Pages choisies. Par T. DUINE. Librairie Emmanuel Vitte, Paris et Lyon, 1912.—in 8°, pp. 348.

This book prepared by the abbé Duine is evidentally destined to claim as a catholic a brilliant author censured by the pope at the time he wrote, and who, out of his own free will, withdrew from the Apostolic Church. Catholicism does not want to lose the benefit of such reputations; time effaces many enmities; quarrels may be explained as misunderstandings. The able *Introduction* (of 60 pages) to the Extracts, mentions very briefly the two dangerous spots in La Mennais' career, namely his ordination as a priest, (27), and especially the great crisis brought about by the revolutionary paper *L'Avenir* which was censured by the Church, induced La Mennais to go to Rome, but brought about his condemnation by the Pope, and finally the open break with Rome (42). Such a man as L. M., the author suggests, could be a great catholic writer (as Chateaubriand, Lamartine, or Hugo) but ought not to have been induced to join the clergy: thus the blame of the break is taken away from the Church and laid at the door of one individual, the bishop of Vannes, while L. M. himself is not guilty either, and thus a real son of the Church. At the same time the condemnation of L. M. by the Pope is justified.

The idea of publishing *Extracts* has been much in favor of recent years, and for such authors as L. M. there is no reason for criticizing it. He wrote much, and he is not enough of a commanding figure to claim our time to read all. After all this book shows that posterity judged him fairly well in not classing him among the very first-class writers. He is an inspirer of lofty thoughts rather than a master of systematic philosophical thought; some of his beautiful prose (from the *Essai sur l'indifférence* and from the *Paroles d'un Croyant*) will

always have their place in French anthologies (*e. g.*, p. 245; 250 of this volume). It would possibly be unjust to say that L. M. was not able to write strictly philosophical works, but whether it was personal preference or the result of circumstances, it is a fact that he never had the necessary quietude for real speculative meditation. We would say that he is perhaps even more a case for the psychologist than for the philosopher. He is a *breton* like Renan, and his career is much like that of the great skeptic. Very mystic and childlike, (as everyone is in that region) but obstinate in their love of truth, both finally left the Church; but while Renan left religion at the same time as the Church, L. M. wanted to keep his religion and even his Catholicism: which can be explained by the fact that Renan belongs to the age of objective science, of naturalism and realism in literatures, of triumphant positivism in philosophy; while L. M. was living during the time of the French Revolution, saw the reign of terror in catholic Brittany, witnessed the persecution of the clergy, remembered the dramatic celebrations of the mass by priests who were daily risking their life for what was to them the sacred truth; this could not but impress the child's mind endowed with much celtic imagination, and even the grown up man could not satisfy himself that beliefs inspiring such devotion were entirely devoid of good foundation.

The extracts from his philosophic writings which are given—the others need not be noted here—are enough to show very conclusively that L. M.'s philosophy was, as that of all romanticists of that period, of a purely pragmatic character. They all worked on the principle that life would be too sad if the hopes of Christian religion were not true. L. M. tried to translate this into philosophical truth: Rationalism he traces back to Cartesianism, and Descartes' rationalism cannot lead to any solid truth, for it is all subjectivism. Descartes starts from the theory that whatever seems evident is true, and the frailty of this theory L. M. points out; among other places he does it in a very witty dialog quoted pp. 93–97; we hear an insane man who, two hundred years after Descartes' death, is absolutely convinced that he is Descartes; it is *evident* to him; and the Cartesian who discusses with him must admit that there is no (Cartesian) way of convincing him that he is wrong.[1]

Now while pure rationalism or Cartesianism leads to subjectivism or to a philosophical zero, it certainly leads us to the need of some principles above reason itself. L. M. points out two: *Tradition* and *Authority*. These do not really discard reason, but they replace by a *raison générale*, the cartesian *raison individuelle*. Let us quote Duine: "la *raison individuelle* . . . est portée aux écarts et à l'anarchie . . . *la raison générale* de l'humanité, . . . est conservatrice des principes primordiaux; en sorte que à la place du *sens privé* des sceptiques, des philosophes, des hérétiques [protestants] se dresse une notion *d'autorité* à laquelle on est obligé de se conformer; en un mot le raisonnement personnel n'a de valeur qu'autant qu'il obeit au consentement universel des peuples, qui forme la véritable raison humaine. . ." (p. 31). Then, L. M. wants to prove that the *Church* tradition is the real *human* tradition, and therefore "authority."

[1] Protestantism is refuted in about the same manner. See pp. 79–81.

As pointed out above this is entirely pragmatic: We must believe in Church dogmas because they are the most useful to us. Chateaubriand had expressed it in one sentence: "La religion est trop belle et trop utile pour n'être pas vraie." The whole *Essai sur l'Indifférence* and *Esquisse d'une philosophie* consists in search for knowledge; but not *any* knowledge; for such only as can satisfy our human desires and aspirations (pp. 97–8). The same is true of L. M.'s theory of liberty. Only if man is free can he change the world from bad to good: *true* philosophy must be philosophy of action, because otherwise the world could not be regenerated (p. 100).

These few notes will show that the book is really a valuable collection of extracts, as it will provide the reader with the fundamental theories of L. M., and these are found in the latter's own words.

ALBERT SCHINZ.

SMITH COLLEGE.

*Grundlagen einer organischen Weltanschauung.* Von M. KREWER. Berlin, 1912.—pp. 73.

This is an attempt at a constructive philosophy by combining organic process and the mathematical infinite. The ultimate terms of reality are matter and function. Their correlates in representation are space and time. There is no empty space, and for time there is no *elementary* concept. For a representative concept, time depends on space, and for its reality upon process.

Mathematics is empirical. Axioms are derived intuitively from identities. Concepts, however, arise from analogous phenomena. The understanding erects as marks of conceptual unity certain adequate and necessary conditions (definitions), to be designated as causality or finality. But definition is not complete unless reduced to process.

Thought is a natural process like every other. The individual brain is a part of the homogeneous brain-mass of humanity. The possibility of collective thought depends on the infinitesimal interactivity of collective and subjective thinking. The individual sensations and perceptions and the individual brain processes marked off by them constitute the *subject*. As subject, man recognizes himself as a part of humanity with which he is bound up by infinitesimal "ties." These ties unite in the brain into a "knot" which is called *the soul*. The latter is synonymous with consciousness, which is the faculty of the brain to be cognizant of the infinite and of itself as a part of the infinite, or God. Organic brain processes and representations accumulate and dispose of a mental stock just as the organism gathers materials for assimilation, propagation, and growth; and just as in the vital process there is a certain "dynamic tendency" compacted in "seed," so, per analogy, the thought process possesses an immanent dynamic tendency. This is the power of the conception of causes, as the adequate and necessary conditions of concepts. The primal source of this dynamic tendency is the organic idea of the universe, or deity, which is incorporated in the cosmic structure, and the tiniest part of which is the human soul.

The infinitesimal cohesiveness of the organic universe is secured by means

of "the process of the limit," best illustrated by the author's squaring of the circle. A circle and a square placed side by side appear identical if far enough removed from the eye. Now this identity can be preserved as the eye approaches the two gradually, provided that at every step, the number of sides of the square is increased, and this *ad finitum*. Just as the mathematical incommensurable is thus resolved into the commensurable, so is, per analogy, the organic process, as, for example, the discrepancy between sense and the intelligible world. To carry out this "axiom," there is required the principle of the points. The "mathematical point" is the infinitesimal of space; the "ethereal point" or *perpetuum mobile* is 'the other' invested with motion or process; the "material point" is the mathematical invested with the infinitely smallest particle of matter, or the atom. Two spatial points infinitesimally contiguous, if ethereal, are by impact or pressure in the relation of cause and effect. This sort of causation may be identified with that above, if the thought process is thoroughly organic and to be related back to matter and function as the sole ultimates. Conceptually, all external phenomena are infinitesimally cohesive, and the same causal nexus extends (infinitesimally) to the intra-organic subject.

The final four Chapters are devoted to an impassioned and metaphorically lucid exposition, with cumulative citations, of the earlier chapters of the Old Testament, to show that this organic speculation coincides with the creation accounts and the Mosaic religion. On the contrary, the writer betrays no sense of evolution, although so urgent in pressing organic process or the biological principle as fundamental. There is no evidence of purpose. Will is nothing more than another term for these congruent dynamic tendencies; as, for example, the crude expression illustrates, that will—the will to know—fertilizes the concepts and generates ideas. Of course the earnest claim of process is wholly abortive, for to open a *Weltanschauung* with static concepts of the spatial type and mere identification forecloses from the start the possibility of growth. This philosophy runs parallel with our New Realism, except that it is rather of the Meinong type: instead of "entity" and "relation," it follows concept and identification. The effort suffers from a lack of acquaintance with scientific psychology and biology, a deficiency compensated for by a plunge into mystical and vitalistic absolutism.

CHARLES A. MOHR.

INDIANA UNIVERSITY.

*Der Aufbau von Kants Kritik der reinen Vernunft und das Problem der Zeit.* Von FRITZ HEINEMANN. Giessen, verlag von Alfred Töpelmann (vormals J. Ricker), 1913.—pp. viii, 212.

The work before us is, as its title indicates, a study of the *Critique of Pure Reason* with special reference to the problem of time. It is divided into four general divisions. The first is devoted to the problem of time "auf der Stufe der Modalität," and covers the first twenty pages of the book. Under the next general problem, "Die Zeit auf der Stufe der transcendentalen Deduktion," (pp. 21–68), the significance of the transcendental deduction of the

categories is discussed in some detail. "Die Zeit auf der Stufe des Schematismus und der Grundsätze" is the heading of the third division of the work (pp. 69–152). Here are discussed: the place of the schematism in the *Critique;* the principles of the pure understanding, extensive magnitude, intensive magnitude, the analogies of experience, substance, causality, reciprocity. The last pages of the work are devoted to a consideration of time and the transcendental Ideas, "Die Zeit in der Sphäre des Ideenproblems" (pp. 153–212).

This work constitutes the second part of the seventh volume of the *Philosophische Arbeiten*, edited by Hermann Cohen and Paul Natorp. The study is a painstaking one, and deserves consideration by the student of Kant's philosophy.

G. W. CUNNINGHAM.

MIDDLEBURY COLLEGE.

*Wahrheit und Wirklichkeit: Untersuchungen zum realistischen Wahrheitsproblem.* Von DR. ALOYS MÜLLER. Bonn, A. Marcus und E. Weber, 1913.—pp. 64.

The avowed purpose of this monograph is to set forth an independent form of realism. Although the author uses elements from several well known forms of realism he does not wish to have his theory confused with any particular form. In the preface he tells us that some of the ideas advanced have already been published in *Archiv. f. syst. Philos.*, XVI Bd., S. 380 ff., and that the central idea was announced in the second part of his book, *Das Problem des absoluten Raumes und seine Beziehung zum allgemeinen Raumproblem* (Die Wissenschaft. Samml. naturw. und mathem. Monographien, 39. H., Braunschweig, 1911). The latter work was reviewed in the PHILOSOPHICAL REVIEW, Volume XXI, p. 475. The kind of realism which the author proposes is said to lie between idealism and extreme realism. To indicate this eclectic character of his theory he designates it *Idealrealismus.* From the epistemological point of view he holds that there are two sorts of ultimates—the psychic and the non-psychic—which unite to form a single reality. The phenomenal world and all its elements are the synthetic union of subjective and objective factors. The monograph is divided into four sections as follows: I, *Wahrheitsbegriff und Wahrheitskriterium;* II, *Wirklichkeitstreue und Wahrheit;* III, *Die Konformität der Wahrheit;* IV, *Zur Werttheorie der Wahrheit.* The main sections are followed by a concise summary and two appended discussions entitled, *Über die Möglichkeit verschiedenartiger Wahrheitssysteme*, and *Über den Realitätscharakter der logischen Gesetze.*

H. G. TOWNSEND.

CENTRAL COLLEGE.

The following books also have been received:—

*The Philosophy of Giambattista Vico.* By BENEDETTO CROCE. Translated by R. G. Collingwood. New York, The Macmillan Co., 1913.—pp. viii, 317. $2.60.

*Nature and Cognition of Space and Time.* By JOHNSTON ESTEP WALTER. West Newton, Pa., Johnston and Penney.—pp. 186. $1.35 pd.

*Common Sense.* By CHARLES E. HOOPER. London, Watts and Co., 1913.—pp. 172, 2/6 net.

*Nietzsche.* By PAUL CARUS. Chicago, The Open Court Publishing Co., 1914.—pp. 150. $1.25 net.

*The Cabala.* By BERNHARD PICK. Chicago, The Open Court Publishing Co., 1913.—pp. 109. 75 cents net.

*Jesus in The Talmud.* By BERNHARD PICK. Chicago, The Open Court Publishing Co., 1913.—pp. 100. 75 cents net.

*Die Probleme der Sprachpsychologie.* Von O. DITTRICH. Leipzig, Quelle & Meyer, 1913.—pp. 148. M. 3.20 geh.; M. 3.80 geb.

*Zur Sammlung der Geister.* Von RUDOLF EUCKEN. Leipzig, Quelle und Meyer, 1913.—pp. viii, 151. M. 3.60 geb.

*Religion und Wirklichkeit.* Von F. K. SCHUMANN. Leipzig, Quelle und Meyer, 1913.—pp. 152. M. 4.80 geh.

*Sören Kierkegaard und die Philosophie der Innerlichkeit.* Von THEODOR HAECKER. München, J. F. Schreiber, 1913.—pp. 69.

*Der pragmatismus von James und Schiller.* Von WERNER BLOCH. Leipzig, Barth, 1913.—pp. viii, 107. M. 3.

*Der Gegenwartswert der geschichtlichen Erforschung der mittelalterlichen Philosophie.* Von MARTIN GRABMANN. Wien, B. Herder, 1913.—pp. vi, 94. 45 cents net.

*Bewegungslehre.* Von VOLKMANN. Berlin, Hans Dohrn G. M. b. H.

*Les Maladies Sociales.* Par PAUL GAULTIER. Paris, Hachette & Cie., 1913.—pp. vi, 268. Fr. 3.50.

*Les Inconnus de la Biologie déterministe.* Par A. DE GRAMONT LESPARRE. Paris, Alcan, 1914.—pp. 293. Fr. 8.50.

*L'Intelligence Sympathethique.* Par GUDMUNDUR FINNBOGASON, Traduit par André Courmont. Paris, Alcan, 1913.—pp. 244.

*La Métaphysique et sa Méthode.* Par Félix Cellarier. Paris, Alcan, 1914.—pp. vii, 787. Fr. 10.

*Esprits Logiques et Esprite Faux.* Par Fr. Paulhan, Paris, Alcan, 1914.—pp. viii, 388. Fr. 7.50.

# SUMMARIES OF ARTICLES.

[ABBREVIATIONS.—*Am. J. Ps.* = *The American Journal of Psychology*; *Ar. de Ps.* = *Archives de Psychologie*; *Ar. f. G. Ph.* = *Archiv für Geschichte der Philosophie*; *Ar. f. sys. Ph.* = *Archiv für systematische Philosophie*; *Br. J. Ps.* = *The British Journal of Psychology*; *Int. J. E.* = *International Journal of Ethics*; *J. of Ph., Psy., and Sci. Meth.* = *The Journal of Philosophy, Psychology, and Scientific Methods*; *J. de Psych.* = *Journal de Psychologie*; *Psych. Bul.* = *Psychological Bulletin*; *Psych. Rev.* = *Psychological Review*; *Rev. de Mêt.* = *Revue de Métaphysique et de Morale*; *Rev. Nêo-Sc.* = *Revue Nêo-Scolastique*; *Rev. Ph.* = *Revue Philosophique*; *Rev. de Ph.* = *Revue de Philosophie*; *R. d. Fil.* = *Riviste di Filosofia e Scienze Affini*; *V. f. w. Ph.* = *Vierteljahrsschrift für wissenschaftliche Philosophie*; *Z. f. Ph. u. ph. Kr.* = *Zeitschrift für Philosophie und philosophische Kritik*; *Z. f. Psych.* = *Zeitschrift für Psychologie und Physiologie der Sinnesorgane, I. Abtl.: Zeitschrift für Psychologie.* — Other titles are self-explanatory.]

*The Fitness of the Environment.* JAMES Y. SIMPSON. Harvard Theological Review, VII, 1, pp. 72–87.

This article is an argument, based upon the fitness of the physical environment, for a teleological interpretation of evolution. The author cites Professor L. J. Henderson's recent volume "The Fitness of the Environment," for evidence of the suitableness of the principal chemical constituents of the earth's surface and atmosphere to meet the requirements of organic life. He endorses Professor Henderson's assertion that "logically, in some obscure manner cosmic and biological evolution are one," while he criticizes his assumption that the underlying cause of this unity, although now not at all explainable mechanistically, will ultimately become so explainable. For though mechanistic hypotheses are perhaps justifiable and even necessary within the restricted domain of a particular science, they are totally inadequate for a world view. In this connection Professor Hobhouse's recent "Development and Purpose" is cited for support. The author concludes that we are inevitably led to a spiritual interpretation of nature based upon environmental fitness, "and upon the gradual awakening and uprising of consciousness till it becomes not merely conscious of its life as a unity, but of the conditions under which it has come into being, and, controlling these, moves as the ultimate Reason," and as such, "shows forth more and more of itself in human personalities and society." The argument is logical and cogent, and deserves to be read.

WILLIAM K. WRIGHT.

*Im Sachen des psychischen Monismus.* G. HEYMANS. Z. f. Psych., 63, 4 u. 5, pp. 241–285; 64, 1 u. 2., pp. 1–33.

This whole article is devoted to a reply to McDougall's attack on all forms of parallelism in "Body and Mind, a History and a Defence of Animism." The main argument consists in showing that while most of McDougall's

polemic is valid as applied to epiphenomenalism, with which he seems to identify all forms of parallelism, still in the case of one form of the latter, psychical monism, the criticisms do not hold. Psychic monism holds that only the psychical exists and that the physical is merely the way in which the former is perceived. Physiological processes in the brain and the brain itself are merely the way our sense organs take cognizance of the true reality, conscious processes. McDougall's claim that dualism is within the province of empirical science while psychic monism is metaphysical in its allegiance is untenable, as the latter does not start from an assertion concerning the ultimate nature of reality from which it attempts to deduce a complete and detailed *Welterkenntniss*. It starts from the facts of anatomy, physiology, and psychophysics, and attempts to set up an hypothesis to explain them. For the consequently posited *Weltbewusstsein*, it claims only so much of the character of ultimate reality as is empirically justifiable, and admits many places where only gradually accumulated knowledge can fill in the missing details in its theory. Again, the positing of a reality which is ultimately psychical does not commit the monist to the doctrine that the whole enduring structure of the world is dissipated into a stream of conscious psychic phenomena, but merely transfers the legality and uniformity to the mental side. As for McDougall's assertion that parallelism implies "that every psychical event has its physical correlate or manifestation," and "that every thought or volition manifests itself under the form of physical processes subject to mechanical laws," the fact is that these are questions for further research to decide. At least the assertion that there is a psychical reality behind every physical event does not necessitate the conclusion that there is a physical correlate for every psychosis. Nor is monism inseparably committed to an associationalistic and atomistic view of mind. Granting that meaning is more than or different from a synthesis of sensations, it does not follow that it may not itself have a physiological correlate as well as sensation. It should be noted in this connection that psychical monism does not make the mechanics of the brain molecules the really guiding force in the play of logical and meaningful connections, and is therefore not open to the charge of absurdity that may be brought against the mechanistic conception. All of these answers follow from the very essence of the monistic doctrine and are not merely additional hypotheses, brought in as aids. McDougall's whole polemic against parallelism applies only to epiphenomenalism. For monism the question is not whether atoms in motion can explain the behavior of a man directed towards the realization of remote ends and abstract ideals, but can this mental life be mediated through the sense organs as a manifold of causally related natural events. Here the causal relation of motive and decision, of logical premises and affirmed conclusions, is mirrored as cortical sequence and pseudo-causality. As to whether the legality of the brain is the same as that of the rest of nature, that is again a matter for empirical results to decide. These premises do not necessitate psychic atomism either, at least not in the sense that individual psychical contents are isolable and capable of independent existence. For

they are all integral parts of the mental reality. Moreover, the doctrine of the sub-conscious, the unconscious, call it what you will, relieves psychic monism of the insuperable difficulty of physiological processes in the brain unaccompanied by psychic processes. The difficulty arising from the lack of a common sensorium can be met by the hypothesis that integrated sensational complexes can be correlated with brain processes which are merely simultaneous, not connected in space.

Are the results of psychic research, which are continually gaining more of a scientific status, explicable only on the basis of animism, as McDougall claims, or can one type of parallelism, at least, namely psychical monism, not only find a place for these 'phenomena' in its system but even furnish guides to further experimentation? The matter involves a consideration of the relation between the individual and the world consciousness. The individual is inclined to look upon his consciousness as a little closed system and to attribute the same character to the minds of others. We find, however, that the closed character of consciousness is not so great as has been thought. In the first place, we have come to realize that outside of the focal processes of any one moment, there is a great sphere of peripheral processes, which is subject to the same laws and is in constant relation to the former. Nor is the matter one of intensity; rather the unnoticed contents of consciousness are in a more loose type of connection with the focal processes. We have, then, the conception that in every individual consciousness at any one moment only a small part of a much more comprehensive mental content is present, and that there is a constant interchange between the two spheres. There is a struggle between the different ideas to attain the focal point, and the chances of anyone's so doing are functions of its intensity, feeling tone, and connections with other ideas. Consequently, the focus is generally made up of sensations and perceptions, but on occasion memory or imaginary complexes may succeed in asserting themselves. A similar type of relation may be posited as existing between the individual and the world consciousness. Parallelism requires that, just as we find brain processes to be related to the other phenomena of nature, albeit not very intimately as compared to their own mutual relationships, we should posit a relationship between the individual and the universal mind which is much less close than that between the specific ideas of the former. As a result of this weakness of the bond, it is easily understood that we are ordinarily not aware of the existing tie. The universal mind is much less unified than the individual, and consequently the interchange of contents within it is much less frequent.—We must conceive the individual as a temporarily isolated part of the universal consciousness. As in the isolated mind, the strongly toned ideas occupy the focus, so in the universal, systems of strongly toned experiences, those of the body, arise, maintain themselves, and then give place to others. And as the victorious idea in a human consciousness drags in its associates and shuts out all processes foreign to it, so does the individual isolate himself from his fellows. No experiences are ever entirely lost, and it seems probable therefore that no life is completely annihilated but

continues to exist as a unity. All of these are, of course, highly hypothetical statements, but they seem to receive certain confirmations from the facts of psychic research. Under this head we understand principally the phenomena of telepathy and manifestations of the dead. Dualism, it is true, leads logically to the conception of immortality, but gives no basis for believing in the communication of minds, both those of the living and those of the dead, at least not from the standpoint of its essential doctrine. And of the special conditions under which these take place it has nothing to say. With psychic monism it is different. In attacking the problem from this point of view, we must set out from the conception of the universal mind. The question would be whether this consciousness is to be conceived of as so constituted as to lead to the occurrence of the phenomena of psychic research under the conditions which have been empirically established. As has been shown, the relation between the individual and the world mind is the same as that between the focal and peripheral parts of the isolated consciousness. Carrying this further, in as far as both types of consciousness are governed by the same laws, there will be associative connections between my mind and that of the universe, only they will be very weak. As a consequence, only rarely will parts of the content of the wider consciousness 'occur' to the individual. Still the possibility of direct intercommunication between the living and between the living and the dead is admitted under favorable circumstances. The rarity of the occurrence is due to the weakness of the interconnections and the strong counteraction of the content of the specific mind. And as peripheral ideas succeed in forcing themselves into the focus especially frequently when strong sense impressions are largely in abeyance and when the content of the focus is relatively disintegrated, so we find the phenomena of telepathy and mediumship to be intimately connected with the hysterical condition, which manifests the two characteristics named above. As the appearance of an idea in the focus of the individual consciousness is favored by associative threads, direct or indirect, between it and the existing processes of maximal clearness, so we find a departed mind manifests itself most readily through the mediumship of one who has been intimately connected with it during life or under conditions that tend to set up such a connection temporarily. The phenomena of automatic movement, also, bear a close similarity to the automatic writing or speaking of the medium in communicating the thoughts of the departed. Again, the lack of clearness of most communications received corresponds to the low degree of intensity of ideas that has fallen away to the remoter borders of the subconscious, even when they succeed in asserting themselves in consciousness for a moment.

R. B. OWEN.

*The Relation of Mystic Experience to Philosophy.* SIR FREDERICK POLLOCK. Hibbert Journal, XII, 1, pp. 35–46.

The philosophical bearing of mysticism has been misunderstood by superficial modern criticism. Mysticism is not necessarily religious in any ordinary sense of the term. The matter of mystical processes is often per-

fectly verifiable by the ordinary tests of other experiences. Mystical experiences are not different from others in not being open to all, and in being incommunicable. It is begging the question to use 'mystic' and 'visionary' as disparaging terms because visions and ecstacies are fallible in many cases. Mystical experiences are common to many faiths and confirm no single dogmatic system. Is there any form of philosophy with which mysticism is plainly incompatible? Not materialism, for the Stoics and some early Christian mystics were materialists. Mystics could hold any form of dualism or idealism. Belief in mysticism does not necessarily commit one to monism, nor to a scant respect for the reality of time and the worth of individual personality, as is instanced by the case of William James. "Broadly speaking, a Platonist is more likely to become a mystic than an Aristotelian, and some forms of later metaphysical speculation appear to have special affinities for mysticism; but we have no warrant for saying that there is any such thing as an exclusive or definite mystical philosophy."

WILLIAM K. WRIGHT.

*Christian Ethics and the Ideal of Nationality.* G. F. BARBOUR. Int. J. E., XXIV, 1, pp. 1–23.

Is the principle of nationality, at present being tested against the wider universalistic ideal, to be abrogated by the principle of universal brotherhood, or does it still remain an essential part thereof? How does the religious view of the solidarity of mankind affect nationalism? The task of Christianity is now the same as in its beginning, that of the reconciliation of various mingling races. The proclamation of universalism has always been the central message of Christianity; but the principle of nationality need not be regarded as counter to the Christian spirit. Jesus himself reverenced the traditions of his own people; and the universalism of the gospels does not exclude the truth that different peoples may have special aptitudes for working out various aspects of the Christian ideal. The present time also shows tendencies making for the breaking down of national exclusiveness: modern industry has become international and a kinship of interest has grown up between the same classes in different countries. But this substitutes for patriotism the less noble exclusiveness of class interests. If the unifying force of patriotism fails to reconcile class and class, the issue will be economic war. Civilization tends, by extinguishing racial differences, to reduce life to a common type; this uniformity may prove as fatal to fruitful intercourse as was the old isolation. The breaking down of racial restraints involves moral peril, for vices are more easily adopted than virtues. Patriotic feeling may still be used to concentrate the humanitarian impulse which, without such direction, is apt to dissipate its energy. An international ideal may be substituted for a cosmopolitan, involving not the negation of nationalism but the inclusion of what is best in nationality in a wider synthesis. The nations should lay aside, not their identity but only their intolerance, and by proving faithful to their several destinies should forward the wider destiny of the world.

NANN CLARK BARR.

*The Main Principles of Sensory Integration.* HENRY J. WATT. The Br. J. Ps., pp. 239–260.

The formulation of principles is highly necessary in Psychology, because it is the sphere in which the effects of the interaction of all the main forms of being —physical, physiological, biological, psychical, and social—are made patent. For a better understanding of Psychology, principles must be formulated which are drawn from its own sources, and which are, therefore, able to do justice to its own particular difficulties. Unless the realm of sensory experience can be properly systematized, there can be no science of Psychology. The sensations must be formed into a sort of "periodic table" which will serve as a framework and basis for the theories regarding the qualities of sensation, and the attributes of sensation must be reduced to a type. For the scientific psychologist such a systematization will lead to a systematization of integrative modes of sensory experience. There are three main principles of sensory integration. (1) The mode which results from the integration of an attribute must bear an immediate introspective resemblance to it. Inductively stated, it means that among the attributes of the simpler experiences, upon which a mode of experience is psychically dependent, there must be one to which it bears a much greater introspective resemblance than to any other. (2) The results of the integration of the same generic attribute in the different senses must be introspectively and functionally similar. The introspective and functional nature of an integrated mode of experience is essentially independent of the attributive or other accompaniments of its integrative basis. By means of this principle we are able to establish general rules for the relation of the generic modes to the generic attributes or features of the experiences from which they are integrated. If a mode of experience fails to occur where we expect it, then the basic variant experiences are absent, and for this the natural limitations of physical and physiological processes must be ultimately responsible. (3) Every typical mode of experience must to some extent at least arise spontaneously and automatically and independently of such processes as reason, thought, determining purpose, and the like, unless these processes themselves are the modes in question. Every mode of experience worthy of that name must make some new addition to experience. There can be no universal guide to the development of the mind; it can develop only when the conditions for that development have been given. These developments come about through some new mode of experience.

HENRY BENTSON.

*L'Inutilité du Vitalisme.* F. BOSC. *Rev. Ph.*, XXXVIII, 10, pp. 358–382.

Barthez was the first to set the problem of the nature of life in terms of modern biology, by believing in the profound unity of life and in the experimental investigation of vital phenomena. The significance of this opening towards the experimental study of life was misunderstood, and vital force was made a metaphysical entity exempt from physical-chemical laws. The experiments of the mechanists lessened the difference between vital and physical

facts; functions were reduced to chemical reactions. Genetically explained, life originated in fragments of plastic substance floating on the water. Haeckel identifies structure with life; the animal is a machine mechanically produced by the structure of the germ. In terms of energy, vital activity is reduced to material activity. The living and the dead worlds are one, for all goes back to the movement of the atom. Neo-Vitalism rejects conscious finalism, but accepts an unconscious finalism by which is produced an endless, spontaneous, evolving creation. Life is the creative force organizing dead matter which alone is susceptible to physical-chemical laws. Only the inert is penetrable by analysis; the living being escapes, for we cannot know what is the vital force independent of matter which directs the plan and is different from physical-chemical action. The problem of the nature of life has been ill put. What Neo-Vitalism calls life is only the life which is apparent; real life, the cause of apparent life, is hidden, below perception. Two questions arise: (1) Is the distinction between living and non-living indeed legitimate? and (2) Is the non-living alone penetrable by analysis? If even inert bodies possess hidden life, all are equally subject to physical-chemical laws and penetrable by analysis. Structure is the support, not the cause, of vital activity. The notion of mass should be replaced by that of force which is cause of the structure and evolution of living bodies. This deep life which we have come to recognize in living bodies exists in the non-living also. Matter is never inert, but gives constant emissions of forces; and these forces which envelop us are reducible to one universal force, which by condensation gives birth to matter, while matter by decomposition lets loose the forces collected in complex living bodies. Apparent life is only a mode of universal life. The difficulty of observing the hidden life gave rise to the distinction between living and dead which is the cardinal error of Neo-Vitalism. Life is common to all beings, and all phenomena are reducible to physical-chemical laws. Modern biology does not take the view either of materialistic monism or Neo-Vitalism, but draws near spiritual monism and so makes Neo-Vitalism useless.

NANN CLARK BARR.

*Le monde comme volonté de représentation.* JULES DE GAULTIER. Rev. Ph., XXXVIII, 11, pp. 479–510.

In current systems of philosophy, except that of Spinoza, reality, as it appears to us in consciousness, is not a finished reality, but an imperfect sketch which has to be transformed into a perfect reality. What characterizes, in fact, such moral conceptions of the world, is an end implied of transforming reality as it is into reality as it ought to be. Now the moral conception involves a contradiction, in that in finding perfection of existence in an ideal justice into which we are to transform an existence given in injustice, it consecrates as a law of existence an essential injustice. Renouncing the justification of existence in the light of our moral aspirations in a progress of evil toward good, the new metaphysic seeks for it a new principle of justification. The fact of religious feeling, moreover, must find a place in the conception of

reality, as well as that of morality. By religion is meant a conception which attributes to existence a logical significance for the forms of our intelligence and an interpretation satisfactory to the forms of our feeling life. The justifying principle fulfilling all these conditions must also be found in experience itself; it must be a phenomenon. The phenomenon sought is found in our aesthetic experience. In the place of a moral end, which has been found self-contradictory, must be substituted, according to the new hypothesis, an aesthetic intention. The world becomes a spectacle or drama, where we at once act a part and behold a performance, deriving satisfaction from both acting and beholding. Morality being recognized as an illusion, phenomena are freed from their moral condemnation, while the illusion itself is justified by the interest and feeling of worth it lends to the spectacle of existence. Our various experiences, which in their practical aspect are either joys or pains, are for our aesthetic appreciation, both as performer and as beholder, all only joys. This aesthetic attitude corresponds closely to Spinoza's "amor intellectualis Dei," and may be defined as love of existence for its own sake. The conditions of aesthetic creation and of aesthetic appreciation are erected into a metaphysic of the spectacular, according to which, for progress toward an ulterior moral end, is substituted as an end the contemplation of existence by itself, which end is continuously realized by existence inventing its own drama under the forms of illusion and desire. The view of the world as "will *to* representation" differs from that as "will *and* representation" by seeing as a positive good the process which Schopenhauer, blinded by pessimistic prepossessions, regarded as only lessened evil. Reality is not denied, but only the moral aspect of reality, morality being reduced to a model, though an indispensable one, according to which aesthetic reality is to be executed. When one sees himself as an actor whose function it is to play well his rôle and enjoy it, the problem of evil, which is the stumbling block of every moral progress theory of justification, is solved by ceasing to be posed. Moral aspirations which in the old philosophy implied an end to be realized, become the means of realization of an end at each instant achieved. All activities of amelioration, social reform, medical science, etc., will of course go on as before; they are an indispensable part of the spectacle, the execution and contemplation of which are coördinate phases of the same fact, both carried on under the form of the moral illusion. Feeling must have been experienced either to be portrayed or for its portrayal to be appreciated. If the value of voluntary illusion be questioned, myriads of examples from daily life establish it abundantly. No other view will account for the fact that in spite of pessimistic recriminations, life remains so dear to the individual.

F. H. KNIGHT.

*Is Realistic Epistemological Monism Inadmissible?* DOUGLAS C. MACINTOSH. J. of Ph., Psy., and Sci. Meth., X, 26, pp. 701–710.

Realistic epistemological monism maintains that the object perceived is existentially or numerically identical with the real object at the moment of

perception, although the real object may have qualities that are not perceived at that moment, and that this same object may exist when unperceived, although not necessarily with all the qualities which it possesses when perceived. It maintains with the neo-realist that what we perceive is existentially identical with the independent reality, and with the epistemological dualist it maintains that the object has when perceived certain qualities—notably the sense-qualities—which it does not possess when not perceived. Immediate knowledge of independent reality in perception is possible, because in sensation there is a creative activity of spirit. Upon occasion of certain stimulations, sense-qualities are creatively produced by the psychic subject, and in some cases with more or less accuracy located in or upon the very object in the environment from which the stimulation proceeded. Consciousness in sensation and elsewhere is a productive activity of a unique sort. The psychic subject produces all the various sense elements which it is able to discover in the surrounding world of physical objects. Psychology thus becomes the science which studies the psychical subject as functioning. The whole process of sensing is the inherited result of what was first achieved in the lower animal from which the human race has descended. Sense-qualities are not produced by objects and lodged in the mind; they are creatively produced by the psychic subject in things or in the individual's own body. Thus secondary qualities are created and thereby the primary qualities are revealed. The fact that where sense-qualities are located in external objects, some of the primary qualities are as directly present to the subject as are the secondary qualities themselves, makes possible an escape from absolute agnosticism. This psychical activity becomes apperception when some ideas of qualities function instead of the actual presentation of those qualities. This apperceptive activity or the instinctive tendency thereto may be transmitted from generation to generation. Only when there appears a new kind of psychical activity in the history of the race, is there an absolute a priori activity. Finally, with this view of epistemology, knowledge relation, when it is a relation of present consciousness, is internal so far as the subject is concerned, and external so far as the object is concerned. Whether relations are to be regarded as internal or external to the terms related, depends upon the purpose with reference to which the question is raised.

HENRY BENTSON.

*Sören Kierkegaard.* H. HÖFFDING. Rev. de Mét., XXI, 6, pp. 709–732.

Sören Kierkegaard, the most truly Danish writer in the history of Denmark, was born in Jutland in 1813. His contributions to Danish literature are notable for the beauty of their descriptions of nature, for their wealth of sentiment, and for their stern philosophy. Between 1843 and 1846 he published a whole poetic, religious, and philosophical literature. His philosophy is one of personality, partly derived from the Socratic principle, which appeared also in the writings of Kant and Fichte. Kierkegaard contrasted his principle of personality with that of scientific research, which he thought involved an

absorption in the study of objective reality. He venerated authority, categories, fundamental concepts; but he believed that these fundamental concepts were founded on experience, and that, existence being always a becoming, it is impossible to form a complete system. The ethico-religious problem occupied him above all else. In his philosophy of life he recognizes various types; as, the aesthetic, the *ironiste*, the moral, and the humorous types. The last type, the religious, is endowed with more moral energy than the others. In the Christian type the highest development possible is reached. Kierkegaard's attack upon the Church was the greatest spiritual struggle in Danish history. It was directed by his desire for sincerity, for intellectual and moral probity; and its result was of two-fold importance. First, the religious problem was seen to be separate from that of metaphysics and was recognized as psychological. Second, religion was shown to demand whole-hearted sacrifice and unswerving loyalty. Kierkegaard's message to humanity was a declaration of the importance of sincerity.

ALMA R. THORNE.

*Logisch-metaphysische Gedanken über Freiheit und Notwendigkeit.* FELIX GOLDNER. Ar. f. sys. Ph., XIX, 3, pp. 275–289.

Instead of logical contradictions ordinary thinking makes use of terms which, while not mutually exclusive in an absolute sense, are easy to deal with because of their positive content. So we have antithetical pairs like being and becoming, subject and predicate, freedom and necessity. The confusions and difficulties of the problem of the will seem to arise from a failure to recognize the fact that the opposition of freedom and necessity is only approximate. Neither Determinism nor Idealism is capable of logical explication without reducing to its opposite. Determinism is inconceivable without some measure of freedom, but there is no salvation for the actual time world in the freedom postulated for the absolute ego. What meaning can be given to freedom except as it is a modification of necessity? On the meaning given by Idealism, freedom approaches too near necessity to serve even as an approximate contradictory in further discussion. If we turn to the purely formal conception of not-necessity, we can see that it too must denote a kind of necessity, however distinct from absolute causal law, if it is to have the universality of truth. But necessity itself, in the sense in which it makes all determination credible and truth possible, coincides with the not-necessity we have set up as the contradictory to absolute causality. "How there can be a condition freer than freedom can describe, and just for this reason of the purest all-embracing necessity, we cannot fathom. That it exists we know through self-conscious intuition, which cannot be shaken by any analysis."

ANITA FREDERICA DE LAGUNA.

*La conscience transcendentale.* C. RADULESCU-MOTRU. Rev. de Mét., XXI, 6, pp. 752–786.

Two exaggerations of Kantianism occur respectively in pan-psychologism and in pan-logism. Both are due to the failure of Kant's synthesis of English

associationism and Cartesian rationalism. The insufficiency of the critical philosophy lies in the artificial relation of these currents of thought to each other. The data of the senses are held together by the transcendental unity of apperception, but the nature of that unity itself is not sufficiently examined. In this transcendental ego Kant finds spontaneity and an identity of self-consciousness. Spontaneity implies that apperception is an organic function. Self-identity implies an abstract, numerical unity. Thus, the unity of apperception is defined by two moments which contradict each other: the unity of individual consciousness, and the ideal unity of consciousness in general. The first is founded on the supposed identity of the psychological self; the second, on the postulates of abstract logic. In explaining the organization of impressions from the senses, recourse is had to the relation between the unity of apperception and the other kinds of unities that prepare the way, as, for instance, the function of imagination; and apperception is thus found inherent in the real, individual consciousness. But in explaining the objective nature of *a priorism*, i. e. the fact that rules deduced from the unity of apperception are the only rules possible for human experience, recourse is had to a mathematical postulate. Kant cements together these two different conceptions, as best he may, with the aid of his discovery of the creative consciousness of reality, but the new perspective does not impose a fusion of the dual elements. In spite of the fact that Kant never lost sight of the distinction between the psychological and the logical, his critique is open to criticism. His transcendental idealism leaves the contradiction still existent between psychology and formal logic. His problem should have been: How does the *individual* consciousness arrive at syntheses having the character of universal and necessary truth? But Kant asked, instead, How are universal and necessary truths possible in *Bewusstsein überhaupt*? Kant did not clearly define this consciousness-in-general. If he had added to its two functions, spontaneity and self-identity, a third one, harmony, the definition would have applied to the notion of genius, current in Kant's time. But Kant himself did not make this identification of genius and consciousness-in-general. That was the task of the Romantic school. He did not answer at all the questions, In what does consciousness in general consist? and, How can the individual human consciousness establish eternal truths? Following the two unreconciled elements in Kantianism, the pragmatists and the uncompromising rationalists arrive at very different results from those in Kant's transcendental idealism. Pragmatists, basing everything on the psychological fact of the individual consciousness, are unable to explain mathematical truths; they cannot pass from the subjective to the universal and necessary. But the rationalists cannot explain the evolution of science; because, basing everything on the *apriori* nature of an absolute and universal reason, their scientific truth—always identical with itself—should be perfect from the beginning. Of the tentative answers to this problem, the most notable are the philosophies that depend upon a biological solution. Müller and Lange attempt to explain the *apriorism* of Kant as due to the morphology and the physiology of nervous matter. Avenarius

followed the same modification of Kantianism in his *Kritik der reinem Erfahrung*, and Mach, in his *Erkenntnis und Irrtum* is following Avenarius. Both of these philosophers remain within the limits of scientific biology; but others, like Nietzsche and Bergson, have constructed a metaphysic of life. The way for this was opened by Schopenhauer, who made the organization of knowledge depend upon the organization of life, and that, in turn, upon the will. Nietzsche makes this more concrete by basing knowledge upon the *Wille zur Macht*, which ultimately aims toward the creation of the superman. Bergson's *élan vital* is the next modification. Apriorism has been replaced by vitalism. Following out the suggestion of another development, the romanticists based their philosophies on the nature of genius, and made a universal panacea of that creative form of consciousness which Kant confined to the domain of aesthetics and art. Hegel, going beyond romanticism, sought the objectivity of the individual consciousness in the evolution of the historical consciousness of humanity. He was the first to suggest the sociological solution, which now finds a champion in the French sociologist, M. Durkheim, according to whom the categories of intelligence are found in social consciousness. But none of these tentative solutions have done away with the fundamental discord between the two elements which Kant left unreconciled.

ALMA R. THORNE.

*Die Begründung einer idealen Weltanschauung.* KARL SKOPEK. Ar. f. sys. Ph., XIX, 3, pp. 289–319.

The two great divisions of metaphysics are Materialism and Idealism. According to the first, matter is the ultimate ground of the world, according to the second, spirit. Idealism has two forms, Pantheism and Theism. Materialism, like Idealism, is monistic; it has three types, as it considers mind as physical, as a result of the physical, or as its concomitant. Each division has its exponents in both ancient and modern philosophy. The true metaphysic must satisfy the needs of the heart and must accord with the results of natural science. Pantheism fails to satisfy the heart since it destroys the integrity of the individual; in excluding teleology it denies scientific observation, for the thoughtful student of nature finds that it displays a harmoniously ordered system of ends. Materialism fails in each of its three forms. Mind and matter cannot be equated, because the matter given in the content of consciousness cannot be the cause of the consciousness which the experience of it presupposes. Nor can spirit be the result of matter; the unity of consciousness cannot be derived from the interplay of brain parts. The materialism which calls mind the concomitant of matter gives up the claim of matter to be the ground principle of the universe. The question as to whether the palm of victory belongs to Idealism or Materialism depends on the nature of the material of which the world is composed. According to Materialism this material is only a collection of atoms; in this case the problem of the rise of life, of the organic from the inorganic, would be insoluble. Modern natural science has come to conceive the world stuff as a metaphysical principle,

force. According to this world view, matter consists of dynamical units, monads, as Bruno and Leibniz named them. Pantheism referred the origin of the world to blind force, materialism to the chance grouping of atoms. But no complete satisfaction can be attained unless the world is seen as the work of a highest intelligence, of a personal God. All finite monads owe their being to the creative force of God. This theory has been called Panentheism. Modern science goes to confirm this dynamic metaphysics. The electron theory echoes the Monadology, and the last word of biology teaches with Leibniz that life never begins or ends absolutely—it presents itself as a continously flowing river of which the larger and smaller waves are the individuals. So science, life, philosophy yields the victory to Idealism against Materialism on account of the transformation of the concept of matter into force.

ANITA FREDERICA DE LAGUNA.

*Ein Beweis für die Unrichtigkeit der Kausalhypothese.* ERNST BARTHEL. Ar. f. sys. Ph., XIX, 3, pp. 355–366.

Natural science has adopted the concept of causality as its ground principle; it might be more truly described as its ground hypothesis and ground error. The ideal of science is to find a cause for every particular phenomenon. Unfortunately its causal hypotheses need constant revision. The root of its difficulties may lie in the falseness of the causal principle, not in any lack of accuracy in the investigations which seek to establish it in any given instance. The authority of the causal principle has never seriously been called in question. Even Hume is unable to conceive of science without the category of causality and hence arises his scepticism of knowledge. When we come to examine the causal analysis of any phenomenon, we find that the cause presented is never a satisfactory one. But even were it possible for science to actually establish its pet hypothesis, in the very moment of that triumph would come the consciousness of the futility of the victory. The fact that A follows B is worth nothing as an explanation of A or B. Real knowledge demands a deduction of phenomena from the essence of things in the way that the properties of a triangle are deduced from its essence. Nature is a system organized according to the laws of thought; only a recognition of this fact can yield any satisfactory explanation of particular events. Only "practical thinking," glorying in its naïvete, considers a philosophy of becoming more valuable than a philosophy of being, a fact as more significant than its essence, meaningless computations more scientific than metaphysical mathematics, and the causal hypothesis more exact than the finest thinking of philosophical enlightenment.

ANITA FREDERICA DE LAGUNA.

*La Connaissance Affective.* H. D. NOBLE. Rev. des Sc. Ph. et Théol., VII, 4, pp. 637–663.

From one point of view all knowledge is affective; the most disinterested act is motivated by feeling and penetrates the affective network about it.

From another point of view, we may distinguish the representative or speculative consciousness from the affective consciousness proper. The former has a non-affective object, and though affective elements excite and envelop it, they change neither its mode of operation nor its objective content. The latter, in addition to being aroused by feeling, has an affective object; namely, the affective state itself. Moreover, in this case, feeling may distort our perception, memory, or reasoning, alter their content, and use the whole representative faculty for its own ends. Viewing the landscape from a car window or solving a mathematical problem illustrates the speculative consciousness. Any feeling, emotion, or desire is an example of the affective consciousness. The 'psychological mechanism' of the affective consciousness, i. e., the way in which feeling influences knowledge, is as follows. Feeling exercises a positive and negative selection in the field of knowledge, creating a fixity of attention on all objects that concern it, and repressing attention to anything else. Attention is reenforced by a unification of consciousness and a convergence of all the faculties of consciousness on the affective object, resulting in a sharpening of the powers of discernment and an enhancement of the value of the representation. But all this is common to both the speculative and affective consciousness. The radical difference between the two is found in their points of departure. In speculative knowledge the mind is passive, neutral, indifferent. In affective knowledge the mind is active; sees what it wants to see, remembers what it can use, argues to its own interest. Conquest replaces discovery; the known, not the unknown is sought. Centripetal supersedes centrifugal attention. Passive selection gives way to active. The basis of selection is no longer objective criteria of the good and true. Selection, attention, application, valuation are all at the service of the affective state. Intuitive virtue, mystic insight, and such proverbs as, "to know one must love," suggest that the content of consciousness is enriched by feeling, but feeling cannot create a new or wider field of vision. The affective state does not enable us to know more or farther than we otherwise could; it does however enable us to know better. For example, the lover knows the object loved better than anyone else because love incites his cognitive faculties to greater efficiency, because he alone enjoys and appreciates the lovable qualities of the object, and because to him alone is revealed that inexpressible somewhat beyond and beneath all visible qualities. Therefore excessive pragmatism errs in supposing feeling perceives or discerns; it merely heightens our ordinary powers of apprehension.

RAYMOND P. HAWES.

*Remarques sur la théorie logique du jugement.* EDMOND GOBLOT. Rev. Ph., XXXVIII, 11, pp. 511–525.

Logicians have often been the dupes of language, confounding the structure of thought with that of the machinery of its expression. Formal logic must be entirely worked over to eliminate the resulting errors, which appear in all its divisions. Thus in the case of modality, examination shows that there is

properly no such thing as modality of judgment, though there are judgments of modality. Confusions arise in the other subjects treated by logic as well, but come out most strikingly perhaps in the case of quality of judgments. A judgment is an assertion, positive or negative, in regard to an object, and in both cases implies the rejection of a contradictory assertion. The judgment in regard to a judgment is not a valid division, the two judgments really forming but one. The indefinite judgment of Kant must also be rejected, as it is excluded by a correct interpretation of the law of contradiction. The various forms which propositions take in regard to quality depend on the accidents of language, and have no significance for the structure of the judgment itself. Forms of speech are often indirect and distorted, as in the proposition: *this language is not free from impertinence*, which is of the form, *A* is not non-(non-*B*). Many cases difficult of analysis arise in connection with the use of attributives of negative form and positive meaning and vice versa. Instances are the word *simple*, which is really a negative, signifying indivisible; *immortality*, again, is the negation of death, which is the negation of life, and *infinity* offers a still more complex case. But the true judgment, when finally found beneath its verbal trappings, is the affirmation or the negation of an attribute, which is always positive.

F. H. KNIGHT.

*L'ambiguité de la notion d'idée chez Spinoza.* F. BLANCHE. Rev. des Sc. Ph. et Theol., VII, 4, pp. 663–680.

Everything has a two-fold reality. As a mode of its respective attribute, constituting a reality external to representation, it has a formal essence. The new nature each thing acquires as a representation or content of consciousness is called its objective essence. Every idea then has two inseparable aspects: its own formal essence (what it is in itself) and the objective essence of its content (what it represents). The first meets the requirement of an irreduceable distinction between the idea and the reality represented; the second that of a perfect correspondence between them. The Scholastics carefully preserved the distinction between idea as entity or form and idea as representation or concept; but Spinoza, influenced by Cartesianism, continually confuses the two, thereby plunging his entire system into obscurity. At times, especially in his earlier writings, the mind is said to be influenced by its object and cannot be explained without reference to its object. Spinoza is then thinking of idea as the objective essence of its content. When he affirms the absolute independence and self-sufficiency of the idea, he has in mind its formal essence. This is in harmony with the parallelism and irreducibility of Thought and Extension. Later Spinoza argues that because idea is a mode of Thought, even its representative aspect cannot depend on or be explained by Extension. Consciousness must find a complete explanation in terms of Thought. The mere fact that an idea is a mode of Thought is an adequate explanation of its essence, origin, and production. The mind is the cause of the whole idea and is entirely active, autonomous, and unaffected by the object.

Even the truth of an idea depends in no way on its object. The correspondence of idea and object is only an "extrinsic denomination" due to Parallelism. Truth must denote some internal characteristic of the idea: its self sufficiency, its conformability to the idea-type, its capacity of embracing the whole objective essence of its object,—in short, its clearness and distinctness. A single trace of the influence of objects on ideas remain: the order of the succession of the ideas of the imagination and memory follows that of things in nature, while all other ideas the mind arranges according to the laws of intelligence. Since the latter operation presupposes memory and imagination, the domination of extension over Thought becomes a brute fact irreconcilable with Spinoza's system. Also, when Spinoza argues from Parallelism to the absolute independence of idea as representation or concept, he passes surreptitiously from the order of essence and existence to the order of knowledge, from the formal essence of the idea to the objective essence of its object, from idea proper to idea in its representative function. The consistency and coherence of his system suffers accordingly.

RAYMOND P. HAWES.

*The Hegelian Concept of the State and Modern Individualism.* H. S. SHELTON. Int. J. E., XXIV, 1, pp. 23–37.

The main influence of English Hegelian thought tends to socialism in that it favors the tendency to do more and more by the direct action of the state; it assumes that when a system is so established that resistance is useless and criticism futile, the loss of liberty entailed is not really felt. Green emphasizes the obligation of the individual toward the state as it expresses the "general will;" but this latter concept is only vaguely defined, either by Green or Bosanquet. It is not the sum of the particular wills, and organization and subordination add nothing new to its nature. With the putting of this concept in its place, it will be seen that the theoretic foundations for such ideas as that the individual has no rights against the State become doubtful. The work of Bosanquet tends to undermine the democratic ideas by criticizing adversely theories which assert the paramount importance of individual liberty. For he holds that self-regarding and other-regarding actions cannot be separated and that the self and law are not alien. He confuses social control with state control, and as society has greater control over the individual than has the State, this confusion is favorable to socialism. His conclusion is, that no true ideal lies in the direction of minimizing the individuality or restricting the power of the State. The mystical concept of general will is used as a support for the increase in the power of the State however constituted. If this concept is rejected, the Spencerian idea of freedom is the only one that remains.

NANN CLARK BARR.

*Gegenstandstheoretische Betrachtungen über Wahrnehmung und ihr Verhältnis zu anderen Gegenständen der Psychologie.* OLIVÉR V. HAZAY. Z. f. Psych., 67, 3u.4, pp. 214–260.

The aim of the article is to make clear certain fundamental concepts in

psychology from the side of "Gegenstandstheorie." Of these concepts, perception especially is considered, but other concepts of an elementary nature are also examined and compared with the perception. In the perception, the act of perceiving must be clearly distinguished from the psychical content of perception, and this, in turn, from the object to which it refers. The contrast between the last two may be partially brought out by saying that the same content may 'intend' (meinen) various objects, and the same object can be comprehended through various contents. The object is expressed in words in various ways. Generally, it completes a sentence: I see "that the bird flies away." To this typical "that"—construction, Meinong gives the name "Objektiv," and this "Objektiv" is the object of the perception. An "Objekt" can never function as the object of a perception. According to the definition of Ameseder, an "Objektiv" not only *has* existence, but *is* existence, while an "Objekt" merely *has* existence but never *is* existence. The sensation, in contrast to the perception, has an "objekt" for its object. That which distinguishes the perception from the functions of judgment and assumption ("Annahme") is, that the perception can comprehend its "Objektiv" only affirmatively, and that this "Objektiv," can be only positive existence or qualified existence ("Sosein");—whereas, in the judgment only one predetermined course is open—either affirmation or negation of the "Objektiv" — and, in the assumption ("Annahme"), either affirmation or negation may be freely chosen. Judgments and assumptions ("Annahme") have all conceivable "Objektive" as material; perceptions, however, are limited to those "Objektive," in which present and positive existence or qualified existence ("Sosein") of existing "Objekte" are expressed. The "Soseinsobjektive," which can be immediately perceived are the qualitative and formal properties of an "Objekt." The special mark of thinking and ideating, is the "placing" ("setzen") of the objects—an expression which means that the idea and the judgment comprehend in their peculiar world "Objekte," which do not exist, or from whose existence they abstract. The idea refers to an "Objekt" with respect to its existence or qualified existence ("Sosein"). The objects of our thinking, on the other hand, are but "Objective" and "Objekte." Finally, as regards striving ("Strebungen"), desire and feeling, the two former have "Objektive" for objects, whereas, the latter has "Objekte."

MABEL E. GOUDGE.

# NOTES.

The Report of the joint committee of the American Psychological and Philosophical Associations, appointed to investigate the circumstances that led to the resignation of Dr. John M. Mecklin from the chair of Philosophy and Psychology in Lafayette College, is published in the Journal of Philosophy for January 29, 1914, and in a somewhat abbreviated form in Science of January 30, 1914.

Professor Henri Bergson has been appointed the next Gifford Lecturer, and will next summer deliver the first part of the course on "The Problem of Personality."

Dr. E. B. Crooks, formerly of Northwestern University, has been appointed professor of Philosophy and Education at Randolph-Macon Woman's College, Lynchburg, Va.

We give below a list of the articles in the current philosophical periodicals:

THE JOURNAL OF PHILOSOPHY, PSYCHOLOGY, AND SCIENTIFIC METHOD, X, 26: *Douglass C. Macintosh*, Is Realistic Epistemological Monism Inadmissable?; *Henry Rutgers Marshall*, Is Psychology Evaporating?; *Eliott Park Frost*, The Belief in Consciousness.

XI, 1: *M. T. McClure*, An Orientation to the Study of Perception; *George Clarke Fox*, The Case Method in Ethics and Its Critics.

XI, 2: *Harold Chapman Brown*, Value and Potentiality; *Isaac Aaronson*, Perception; *J. E. Turner*, Miss Calkins on Idealism and Realism.

XI, 3: *Harold Chapman Brown*, The Thirteenth Annual Meeting of the American Philosophical Association; The Case of Professor Mecklin: Report of the Committee of Inquiry of the American Philosophical Association, and the American Psychological Association.

THE PSYCHOLOGICAL BULLETIN, X, 12: *J. H. Leuba*, Sociology and Psychology.

MIND, 89; *F. C. S. Schiller*, Aristotle's Refutation of 'Aristotelian' Logic; *J. S. Mackenzie*, The Meaning of Reality; *H. H. Joachim*, Some Preliminary Considerations of Self-Identity; *L. P. Saunders*, A Criticism of Dr. Mackenzie's Philosophy of Order; Discussions: *A. W. Benn*, Aristotle's Theory of Tragic Emotion; *B. Bosanquet*, Idealism and the Reality of Time; *L. E. Hicks*, Is Inversion a Valid Inference; *B. Bosanquet*, The Analysis of Categorical Propositions.

THE AMERICAN JOURNAL OF THEOLOGY, XVIII, 1: *Charles Whitney Gilkey* The Function of the Church in Modern Society; *D. D. Luckenbill*, The Hittites; *Ernest D. Burton*, Spirit, Soul, and Flesh, II; *R. H. Strachan*, The Idea

of Pre-Existence in the Fourth Gospel; Critical Notes: *Frank C. Porter*, A Source-Book of Judaism in New Testament Times; *J. M. Powis Smith*, The Deuteronomic Tithe; *Rendel Harris*, St. Luke's Version of the Death of Judas; *Edgar J. Goodspeed*, The Freer Gospels.

THE HARVARD THEOLOGICAL REVIEW, VII, 1: *William R. Arnold*, Theology and Tradition; *D. C. Macintosh*, What is the Christian Religion?; *W. S. Archibald*, Religion in Some Contemporary Poets; *James Y. Simpson*, The Fitness of the Environment; *John E. LeBosquet*, The Modern Man's Religion.

THE INTERNATIONAL JOURNAL OF ETHICS, XXIV, 2: *G. C. Henderson*, Nature Selection and Rational Selection; *J. W. Scott*, Ethical Pessimism in Bergson; *S. Radhakrishnan*, The Ethics of the Vedanta; *R. D. O'Leary*, Swift and Whitman as Exponents of Human Nature; *Wilson D. Wallis*, The Problem of Personality.

THE HIBBERT JOURNAL, XII, 2: *F. C. S. Schiller*, Eugenics and Politics; *J. B. Baillie*, Self-Sacrifice; *Elizabeth Macadam*, The Universities and the Training of the Social Worker; *Miss M. D. Petre*, The Advantages and Disadvantages of Authority in Religion; *R. L. Orr*, The Scottish Church Question; *W. A. Curtis*, The Value of Confessions of Faith; *Hubert Handley*, Ought There to Be a Broad Church Disruption?; *A. W. F. Blunt*, The Failure of the Church of England; *J. Arthur Hill*, Changing Religion; *Henry C. Corrance*, Bergson's Philosophy and the Idea of God; *T. Rhondda Williams*, Syndicalism in France and Its Relation to the Philosophy of Bergson; *Charles W. Cobb*, Certainty in Mathematics and in Theology; *J. E. Symes*, The Johannine Apocalypse.

THE MONIST, XXIV, 1: *Bertrand Russell*, On the Nature of Acquaintance; *F. G. Henke*, Wang Yang Ming, a Chinese Idealist; *Richard Garbe*, Christian Elements in Later Krishnaism and in Other Hinduistic Sects; *A. H. Godbey*, Ceremonial Spitting; *Leonard Thompson Troland*, The Chemical Origine, and Regulation of Life; Criticisms and Discussion: *Philip E. B. Jourdain*, The Economy of Thought; *Karin Costelloe*, An Answer to Mr. Bertrand Russell on the Philosophy of Bergson; *P. G. Agnew*, "Multiplication of Pears and Pence."

AMERICAN JOURNAL OF PSYCHOLOGY, XXV, 1: *Edmund C. Sanford*, Psychic Research in the Animal Field: Der Kluge Hans and the Elberfeld Horses; *E. O. Finkenbinder*, The Remembrance of Problems and of their Solutions: a Study in Logical Memory; *A. T. Poffenberger, Jr.*, The Effects of Strychnine on Mental and Motor Efficiency; *Samuel W. Fernberger*, A Simplification of the Practice of the Method of Constant Stimuli.

THE PSYCHOLOGICAL REVIEW, XX, 6: *Percy W. Cobb and L. R. Geissler*, The Effect on Foveal Vision of Bright Surroundings; *Anna Wyczoikowska*, Theoretical and Experimental Studies in the Mechanism of Speech; *Herbert Sidney Langfeld*, Voluntary Movement Under Positive and Negative Conditions; *Truman Lee Kelley*, The Association Experiment: Individual Differences and Correlations; *Robert MacDougall*, The 'Colored Words' of Art; *Laura Lettie Smith*, Whipple's Range of Information Tests.

XXI, 1: *H. L. Hollingworth*, Individual Differences Before, During, and After Practice; *D. L. Lyon and Henry L. Eno*, A Time Experiment in Psychophysics; *Percy W. Cobb*, The Effect on Foveal Vision of Bright Surroundings, II: *A. M. Feleky*, The Expression of the Emotions; *H. M. Johnson*, A Slit Mechanism for Selecting Three Measurable Monochromatic Bands; *B. H. Bode*, Psychology as a Science of Behavior; *Knight Dunlap*, The Self and the Ego; *J. W. Baird*, The Phenomena of Indirect Color Vision.

ZEITSCHRIFT FÜR PSYCHOLOGIE UND PHYSIOLOGIE DER SINNESORGANE, LXVII, 3 u. 4; *G. E. Müller*, Neue Versuche mit Rückle; *Olivér v. Hazay*, Gegenstandstheoretische Betrachtungen über Wahrnehmung und ihr Verhältnis zu anderen Gegenständen der Psychologie; *Stefan Baley*, Über den Zusammenhang einer grösseren Zahl wenig verschiedener Töne; *Julius Pikler*, Empfindung und Vergleich, I; *Erwin Ackerknecht*, Über Umfang und Wert des Begriffs "Gestaltqualität."

KANT-STUDIEN, XVIII, 4: *Oscar Ewald*, Die deutsche Philosophie im Jahre 1912; *Hans Pichler*, Zur Entwickelung des Rationalismus von Descartes bis Kant; *Willi Schink*, Kant und die stoische Ethik; *E. von Aster*, Der VIII. und XV. Band der Berliner Kant-Ausgabe.

VIERTELJAHRSCHRIFT FÜR WISSENSCHAFTLICHE PHILOSOPHIE UND SOZIOLOGIE, XXXVII, 4: *Ernst Sauerbeck*, Vom Wesen der Wissenschaft, inbesondere der drei Wirklichkeitswissenschaften, der "Naturwissenschaft," der "Psychologie" und der "Geschichte."

REVUE DE PHILOSOPHIE, XIV, 1: *P. Duhem*, Le temps et le mouvement selon les scolastiques, II; *Louis de Contenson*, L'innéisme Kantien des fondements mathématiques; *A. Véronnet*, Les hypothèses cosmogoniques; *G. Jeanjean*, Revue critiquee de pédagogie.

REVUE PHILOSOPHIQUE, XXVIII, 12: *P. Sollier*, Mémoire affective et cénesthésie; *J. Pérès*, La logique du rêve; *A. Rey*, Les fondements objectifs de la notion d' électron.

XXXIX, 1: *E. de Roberty*, Les nouveaux courants d'idées dans la sociologie contemporaine; *Revault d'Allonnes*, L'attention indirect; *A. Chide*, La science et le surnaturel; *Lalo*, Le premier Congrès d'Esthétique; Notes et Documents: *F. Picavet*, Commémoration de Roger Bacon.

REVUE DE MÉTAPHYSIQUE ET DE MORALE; XXI, 6: *H. Höffding*, Sören Kierkegaard; *E. Goblot*, La relation des jugements; *C. Radulescu-Motru*, La conscience transcendantale, critique de la philosophie Kantienne; Etudes Critiques; *I. Talayrach*, La philosophie de l'histoire de Julius Bahnsen d'après des documents inédits; Questions Pratiques; *Th. Ruyssen*, La morale sexuelle; *A. Lalande*, L'individualisation de l'impôt.

REVUE NEO-SCOLASTIQUE DE PHILOSOPHIE, 80: *D. Nys*, Le temps a-t-il commencé et finira-t-il?; *J. Cochez*, L'esthétique de Plotin, II; *F. Palhoriès*, La

théorie de la connaissance dans la philosophie de Gioberti; *A. Pelzer*, Godefroid de Fontaines. Les manuscrits de ses Quolibets conservés à la Vaticane et dans quelques autres bibliothèques; Programme des cours de l'Institut supérieur de Philosophie; *M. de Wulf*, Le mouvement néo-scolastique.

RIVISTA DI FILOSOFIA, V. 5: *A. Faggi*, Del giudizio particolare; *F. Weiss*, Note critiche alla "Filosofia dello Spirito" di Benedetto Croce; *G. M. Ferrari*, L'umanesimo filosifico; *R. Resta*, Concetto d'una pedagogia; *A. Marchesini*, L'amicizia nella vita e nell'educazione; *M. B. Zanotto*, Saggio di una Filosofia dell'Individuazione.